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# REPORTS

OF.

### AN INVESTIGATION

CONCERNING THE COST OF MAINTAINING THE PUBLIC SCHOOL SYSTEM

OF

THE CITY OF NEW YORK,

TOGETHER WITH AN ANALYSIS OF THE BOARD OF EDUCATION DEPARTMENTAL ESTIMATE FOR 1906,

BY THE

# DEPARTMENT OF FINANCE

(Investigations Division)

Submitted to the Board of Estimate and Apportionment.

NEW YORK, OCTOBER 31, 1905.

New York:
MARTIN B. BROWN COMPANY, PRINTERS,
Nos. 49 to 57 Park Place.

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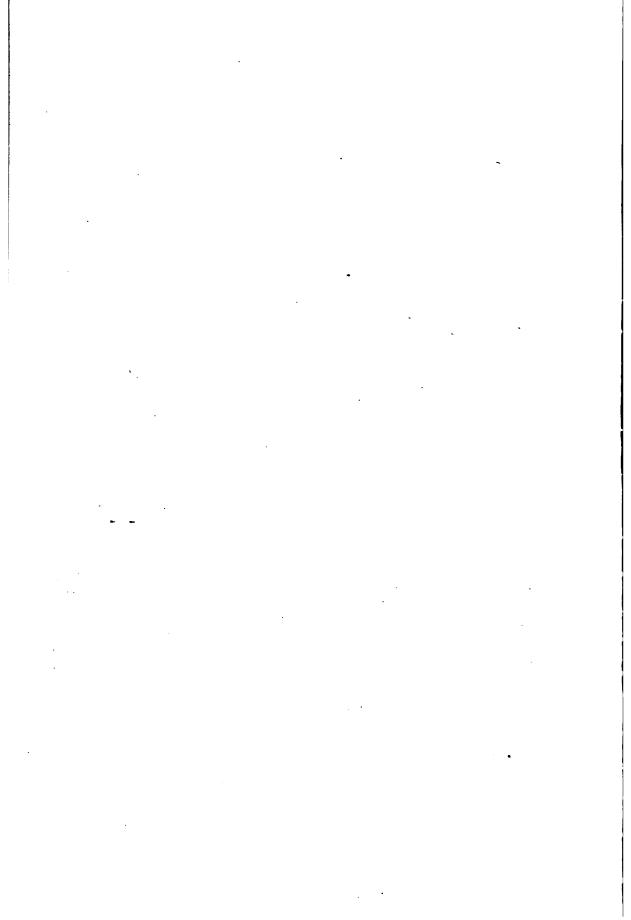
Department of Finance, October 31, 1905.

To the Honorable Board of Estimate and Apportionment:

Gentlemen—In view of the growing importance of the public school system, as representing the largest single share of the Budget, I have deemed it advisable to carry forward the investigations of the Finance Department into school administration. Four reports are submitted herewith. The first presents an analysis of the estimate received from the Department of Education for the year 1906, along with specific recommendations pointing out such economies as are thought to be practicable and the needs which must be regarded generously. The remaining three reports connect the inquiry with the facts contained in the reports of the Investigations Division submitted to you by me in June, 1904. Proceeding further, they undertake to subject the entire management of the elementary schools to searching yet friendly and impartial inquiry, with the aim of producing the best educational results.

Respectfully,

(Signed) EDWARD M. GROUT, Comptroller.



#### Analysis of Department of Education Estimate for 1906.

Hon. EDWARD M. GROUT, Comptroller:

Sir—Pursuant to your instructions, an analysis has been made of the estimate of the Department of Education for the year 1906, and as a result of such analysis the following report is hereby submitted:

The total estimate of the Board of Education for the year 1906, including both the General and the Special School Funds, is \$25,126,040.96. This is a net increase of \$3,129,023.19 over the amount appropriated for school purposes for the year 1905, and a net increase of \$894,188.14 over the estimate of the Board of Education for the said year.

As the result of this examination it is recommended that \$18,739,422.97 be appropriated for the General School Fund for 1906 and \$4,630,976.49 for the Special School Fund, making a total of \$23,370,399.46, which amount represents an increase of \$955,554.23 in the General School Fund and \$417,827.46 in the Special School Fund over the appropriations for 1905, or a total net increase in both funds of \$1,373,381.69 over the 1905 appropriations. The amount here recommended to be appropriated for the General School Fund for 1906, \$18,739,422.97, exceeds the product of the three mill tax provided by law for General School Fund purposes by \$1,002,984.29.

The General School Fund estimate for 1906, aggregating \$19,403,966.47, constitutes the proposed expenditures for the salaries of the teaching force, including Teachers, Supervisors, Superintendents, Lecturers and all persons engaged in the work of either instruction or supervision in the public schools of the City.

The Special School Fund estimate for 1906, aggregating \$5,722,074.49, constitutes the proposed expenditures for books and other school supplies, general repairs, furniture and repairs of, Janitor service, salaries of Officers and Clerks, the general expense account of the Board of Education and other similar items incidental to the maintenance of the school system. Moneys for the construction of new buildings and the purchase of sites therefor are provided by the issue of Corporate Stock.

A summary of the Board of Education estimates, General and Special School Funds, from 1903 to 1906, inclusive, is here given, together with the amounts appropriated and made available by transfer each year, and the expenditures from the 1903 and the 1904 accounts up to June 30, 1905.

#### DEPARTMENT OF EDU

#### Estimates, Appropriations and Expenditures, 1903 to 1906,

	General School Fund.
Board of Education, Estimate 1903	\$15,899,618 48
Board of Education, Estimate 1904	17,264,974 55
Board of Education, Estimate 1905	18,728,487 47
Board of Education, Estimate 1906	19,403,966 47
Appropriations and Transfers, 1903	15,899,618 48
Appropriations and Transfers, 1904	16,572,227 21
Appropriations and Transfers, 1905	17,783,868 74
Expenditures to June 30, 1905—1903 Account	15,771,714 04
Expenditures to June 30, 1905—1904 Account	16,499,472 52

#### The Three-Mill Tax and How It Operates.

The Charter provides that the Board of Estimate and Apportionment shall appropriate for the General School Fund an amount equal to not less than three mills on every dollar of assessed valuation of the real and personal estate of The City of New York liable to taxation, but this three-mill product has not been deemed sufficient for the needs of the schools during the past three years and an extra allowance above the mill product has therefore been made. This extra allowance has been as follows:

#### Budget Allowance Over Three-Mill Product.

Year.	Three- Mill Product.	Budget Allowance.	Extra Allowance Above Mill Product.	
1903	\$15,428,190 87	\$15,651,883 49	\$223,692 62	
1904	16,297,196 75	16,657,227 21	360,030 46	
1905	: 16,921,627 97	17,783,868 74	862,240 77	

CATION. (SYNOPSIS.)

Inclusive, General and Special School Funds.

Increases.	Special School Fund.	Increases.	Decreases.	Totals, Both Funds.	Total Increases.
	\$5,330,448 10			\$21,230,066 58	
\$1,365 <b>,3</b> 56 07	5,995,497 75	\$665,049 65		23,260,472 30	\$2,030,405 72
1,463,512 92	5,503,365 35		\$492,132 40	24,231,852 82	971,380 52
675,479 00	5,722,074 49	218,709 14	•••••	25,126,040 96	894,188 14
	4,288,652 08		• • • • • • • •	20,188,270 56	
672,608 73	4,255,945 55	• • • • • • • • • • • • • • • • • • • •	32,706 53	20,828,172 76	639,902 20
1.211,641 53	4,213,149 03		42,796 52	21,997,017 77	1,168,845 01
	4,244,130 78		• • • • • • • •	20,015,844 82	
727,758 48	4,125,051 43		119,079 35	20,624,523 95	608,679 13

The assessed valuation for 1905 is \$5,912,146,227, making the three-mill product for 1906		3
The additional amount asked for General School Fund for the year 1906, in excess of the three-mill tax, is	1,667, <b>527</b> 79	)
Total	\$19,403,966 47	- 7 -

#### A General Fund Analysis.

It has been found impracticable to institute a detailed comparison of the amounts estimated to be required for the several purposes of the General Fund for 1906, with the estimates, and appropriations and amounts made available by transfer for the three preceding years, and with the approximate corresponding expenditures for each item for the years 1903 and 1904, for the reasons that the appropriation for the General School Fund is made in bulk, and that a separate accounting has not been kept of all disbursements from this fund for each of the items mentioned in the estimate. As far as such a comparison can be made with the data at hand, it is set forth in the comparative table presented herewith and marked Schedule A.

#### SCHEDULE

#### **GENERAL**

..... \$16,572,227 21

Summary.

\*Appropriation and Amounts Made

\*Appro-Board of Educa- priation and tion Estimate Amounts Made for 1903. \_ Available by from 1903 Fund
During 1903, Board of Educaas per Board
of Education for 1904. Available by for 1903. Transfers, 1903. Annual Report. Transfers, 1904. or regular day schools ...... \$14,699,934 48 For \$14,488,565 34 \$15,550,995 55 For evening schools 411,328 00 456,515 79 697,050 00 For vacation schools, play-grounds and rec-reation centers. 123,206 00 182,048 55 307,079 00 For general super-vision ...... For Attendance 204,246 79 237,100 00 219,500 00 For Attenua.
Officers .....
For corporate schools .....
Evening Lec-64,650 00 69,174 04 91,750 00 300,000 00 287,175 00 300,000 00 7. 63,850 56 81,000 00 81,000 00 School ..... Totals of estimates \$15,899,618 48

Expenditures

Totals of expenditures......\*\$15,751,576 07 Total increases and decreases, estimate of 1906, compared with estimate of 1905......

Totals of appropriations...... \$15,899,618 48

Total net increase, estimate of 1906, compared with estimate of 1905...... Total increase, estimate for 1906, over appropriations and amounts made availabl

...... \$17,264,974 55

. . . . . . . .

<sup>\*</sup> Appropriations for General School Fund are made in bulk for these accounts consolidated.

<sup>†</sup> Figures in this statement represent disbursements actually made to the end of the year for \$127,904.44; 1904 account, \$72,754.69.

"A."

#### SCHOOL FUND.

#### 1903 to 1**906**.

Expenditures from 1904 Fund During 1904, as per Board of Education Annual Report.	of Educa-	*Appro- priation and Amounts Made Available by Transfers, 1905.	for 1906.	Estima Compar Increase	ed.	of 1906 as with 1905.	Increase of 1906 Estimate Over Amounts Appropriated and Made Available 1905.
\$15,298,122 58	\$17,104,232 14		\$17,704,186 9	7 \$599,954	83	•••••	
450,948 15	667,100 00		694,261 0	0 27,161	00	•••••	
147,468 96	217,772 00		208,218 5	o		\$9,553 50	
271,300 97	266,433 33		<b>2</b> 67,800 0	o 1,366	67		
81,101 34	91,950 00		96,000 0	0 4,050	00	•••••	
280,950 00	300,000 00		300,000 0	o		•••••	
55,422 12	81,000 00		81,000 0	o			•
•••••			52,500 0	52,500	00	•••••	
	\$18,728,487 47		\$19,403,966 4	7			
		\$17,783,868 74					
<b>†\$16,585,314 12</b>							
• • • • • • • • • • • • • • • • • • • •			•••••	\$685,032	50	\$9,553 50	•
				675,479	00		
е 1905				• • • • • • • • • •			1,620,097 78
							· · · · · · · · · · · · · · · · · · ·

which the appropriations were authorized. The balances on June 30, 1905, were: 1903 account,

The General Fund estimate for 1906 contains 37 separate items of proposed expenditure, three of which are new, namely: Playgrounds for Mothers and Babes (Item 25), Baths (Item 27), and Salaries of the Principals and Teachers of the Jamaica State Normal School (Item 37). As a basis for considering the items separately in order to get at the nature of the proposed increases of expenditure for 1906, the following schedule, comparing the estimates for 1905 and 1906, as presented by the Board of Education is herewith presented.

#### SCHEDULE "B."

Analysis of 1906 and 1905, General School Fund Estimates, as Presented to the Board of Estimate, Showing Increases and Decreases.

		Estimate of	Estimate of	Estimates of 1906 at 1905 Compared.	
		All Boroughs.	All Boroughs.	Increase.	Decrease.
	Elementary Schools.				
1.	For salaries of persons now employed, May 3, 1905, in Elementary Schools, computed at the rates which will be operative December 31, 1905. (Fig- ures based upon actual name by name				
2.	computation)  For annual automatic Davis Law increments for persons mentioned in Paragraph 1, above. (Figures based upon actual name by name computa-	\$13,344,825 00	\$12,836,187 00	\$508,638 oo	••••••
3.	tion.) To fill vacancies existing in Elementary Schools at the time of preparation of this estimate; persons commencing c.rvice at opening of schools in Sep- timber, 1905, and consequently not included in the regular Elementary School schedules covered in Para- graph 1, above, and hereinafter sub- mitted. These classes, prior to Sep-	193,427 <b>3</b> 9	202,708 28	•••••	\$9,280 <b>8</b> 9
4.	tember, 1905, were in charge of substitutes  To provide for increased register up to December 31, 1905, estimated at five per cent. over December 31, 1904 (27,000 pupils); that is, the estimated cost for 1906 of salaries of Teachers in new positions whose services begin	336,450 00	386,450 00	•••••	50,000 <b>0</b> 0
5.	between September 1 and December 31, 1905 To provide for increased register during 1906, estimated at five per cent. (28,000 pupils); that is, the estimated cost for 1906 of salaries of persons		400,500 00		36,100 66
6.	beginning service in new positions during 1906	229,481 25			16,272 of
	High and Training Schools.				
7.	For salaries of persons now employed, May 31, 1905, in High and Training Schools, computed at the rates which will be operative December 31, 1905. (Figures based upon actual name by name computation.)		o 1,612,980 00	153,385 00	

		Estimate of	Estimate of	Estimates o	
		All Boroughs.	All Boroughs.	Increase.	Decrease.
<b>8.</b> 9.	For annual automatic Davis Law increments for persons mentioned in Paragraph 7, above. (Figures based upon actual name by name computation.)  To fill vacancies existing in High Schools at the time of preparation for this	33,178 13	33,447 98		269 85
	estimate; persons commencing service at the opening of schools in September, 1905, and consequently not included in the regular High School schedules, covered in Paragraph 7, above, hereinafter submitted	22,450 00	1		
10.	To provide for increased register up to December 31, 1905, estimated at twelve per cent. over December 31, 1904 (2,250 pupils); that is, the estimated cost for 1906 of salaries of Teachers in new positions whose services begin between Sentember 1				
1.	and December 31, 1905	90,857 49	247,916 33	•••••	51,408 84
<b>2.</b>	during 1906	11,600 co			
3.	Truant Schools.  For salaries of all persons now employed May at your in Truent				
14.	ployed, May 31, 1905, in Truant Schools, computed at the rates which will be operative December 31, 1905. (Figures based on actual name by name computation.)  For annual automatic Davis Law increments for persons mentioned in Para-	10,060 00	9,614 00	446 00	•••••
	graph 13, above. (Figures based upon actual name by name computation.)	296 25	288 92	7 33	
1 5.	Special Branches.  For salaries of persons now employed, May 31, 1905, as Teachers of special branches in Elementary Schools, computed at the rates which will be operative December 31,				
6.	1905. (Figures based upon actual name by name computation.) For annual automatic Davis Law increments for persons mentioned in Paragraph 15, above. (Figures based	379,530 00	364,585 00	14,945 00	•••••
7.	upon actual name by name computation.)  To fill vacancies existing in the corps of Teachers of special branches in Elementary Schools at the time of preparation of this estimate; persons commencing service at opening of schools in Sentember, 1905, and		5,637 07		961 <b>6</b> 3
	commencing service at opening of schools in September, 1905, and consequently not included in the regular schedule of Teachers of special branches, mentioned in Para- graph 15, above, and hereinafter				
	submitted	19,900 00	32,700 00	•••••	12,800 00

		Estimate of 1906.	Estimate of	Estimates of	
		All Boroughs.	All Boroughs.	Increase.	Decrease.
18.	To provide for increased register from September 1, 1905, to December 31, 1906; that is, the estimated cost for 1906 of salaries of Teachers of special branches (average date of appointment April, 1906): Teachers, cooking, 32; Teachers, shopwork, 33; Teachers, German, 3; Teachers, German, 2.  Evening Schools.		44,100 00	3,825 00	
19.	For salaries for 1906, for all persons employed and to be employed in Elementary Evening Schools for the term 1905-1906	424,690 00	387,810 00	3 <b>6,88</b> 0 00	••••••
20.	For increased attendance in Elementary Evening Schools in 1906	42,469 00	78,470 00		36,001 00
21.	For salaries for 1906, for all persons employed and to be employed in Evening High Schools for the term of 1905-1906	207,820 00	167,350 00	40,470 00	
22.	For increased attendance in Evening High Schools in 1906	19,282 00	33,470 00		14,188 00
	Vacation Schools, Evening Recreation Centres, Playgrounds, etc.				
23.	For Vacation Schools	71,314 50	77,940 00		6,625 50
24.	For Vacation Playgrounds	52,020 00	63,600 00		11,580 00
25.	For Playgrounds for Mothers and Babies	2,880 00		2,880 00	
<b>2</b> 6.	For Evening Recreation Centres	76,356 00	76,232 00	124 00	
37.	For Baths	5,648 00		5,648 00	
	General Supervision.				
28.	For Board of Superintendents	52,500 00	52,500 00	• • • • • • • • • • • • • • • • • • • •	
29.	For District Superintendents	130,000 00	130,000 00		
30.	For Board of Examiners	20,000 00	20,000 00		
31.	For Supervisors, Directors, et al	65,300 00	63,933 33	1,366 67	
	Attendance Officers.				
32. 33.	For salaries of present corps For salaries of additional Attendance Officers for Evening School pur- poses and work among newsboys	83,700 00	82.500 00	1,200 00	
	Officers for Evening School purposes and work among newsboys	12,300 00	9,450 00	2,850 00	
	Miscellaneous.				
34.	For Corporate Schools	300,000 00	300,000 00		•
35.	For Lecturers' fees	81,000 00	81,000 00		
36. 37.	For substitutes in place of absentees, also per diem Teachers For salaries of the Principal and the	400,702 <b>0</b> 2	299,884 23	100,817 79	····· <u>:</u> •
•	For salaries of the Principal and the Teachers of Jamaica Normal School (chapter 524, Laws of 1905)	52,500 00		52,500 00	
-					

#### REGULAR DAY SCHOOLS.

(Items 1 to 18, Inclusive.)

The bulk of the General School Fund is for the maintenance of the regular day schools, the proposed expenditures for this purpose during the year 1906 being \$17,704,186.97. This amount represents an increase of \$599,954.83 over the estimate for the same purpose for 1905, and of \$2,406,064.39 over the expenditures for these schools during the year 1904. The main part of this increase is to provide for new teachers rendered necessary by the increase in the registration of pupils in the schools. The regular day schools include the elementary schools, the high and training schools, and the truant schools.

#### ELEMENTARY SCHOOLS.

(Items 1, 2, 3, 4, 5 and 6).

Salaries of Persons Now Employed-

Item 1 in the estimate for 1906, aggregating \$13,344,825, is for salaries of persons employed May 31, 1905, in the elementary schools, computed at the rates which will be operative December 31, 1905, the figures being based upon an actual name by name computation. This includes principals, assistant principals or heads of departments, class teachers, kindergarten teachers and additional teachers or clerks.

Although the expenditures proposed in this item are composed of fixed charges with increases which are mandatory, and it would therefore appear that no reductions are practicable, still the fact is, as shown in the detailed report on "Economies in the Elementary Schools," herewith submitted, that expenditures for clerical services and for salaries of principals and assistants to principals are greater than need be, and that large economies are possible in this direction through transfers as hereinafter stated.

The clerical and supervisory work in the elementary schools is on a basis which admits of large economies. Prior to your inquiry into the cost of maintaining the school system, the unbusinesslike policy had prevailed of paying \$1,240, \$1,320, and even \$1,440 a year for purely clerical services in these schools, with the result that such service was costing more than double the amount necessary, it having been customary to fill the position of additional teacher or clerk with a regular teacher at schedulè rates—usually one of long experience and therefore high salaried. The Special Committee on Economy, appointed by the Board of Education in January, 1904, recommended that the Board of Superintendents be instructed to transfer all regular teachers engaged in clerical work to class-room positions and to fill their places with substitutes who should receive \$3 a day. As a result of this policy, expenditures for clerical services in the elementary schools have been reduced nearly \$100,000 per year, but there is still room for a further reduction. There are 318 elementary schools entitled to an extra or additional teacher who is assigned to clerical work. One hundred and sixty-six of these positions have already been filled with substitutes, and this reform should be carried to the full during the coming year.

The average annual salary paid to regular teachers acting as clerks is \$1,204. The amount paid to a substitute teacher, at the rate of \$3 per day for every day of actual service, averages \$576 per year. If the remaining 152 clerical positions in the elementary schools were filled with substitute teachers at \$3 per day, it would effect a saving of \$95,456 per year. The experience of the past 18 months has proved that the clerical service in the elementary schools can be performed with entire satisfaction by substitutes selected from the regular list, and it is therefore recommended that the estimate under consideration be reduced this amount.

#### Davis Law Increments.

Item 2 of the estimate, aggregating \$193,427.39 as compared with \$202,708.28 in 1905, is for proposed expenditures for automatic Davis Law increments in the salaries of persons mentioned in Item 1, the calculation being based upon actual name by name computation. This Davis Law increase in Teachers' salaries is mandatory, but it would appear that there is an available asset of some \$100,000 which should be set over against this amount which would, in effect, decrease it to that extent. Several hundred Teachers resign every year (436 during the school year ending July 30, 1904), the majority of whom are experienced and therefore high-salaried, their places being filled by new Teachers, a large proportion of whom are Training School graduates, at a minimum salary. The Special Committee appointed by the Board of Education for the purpose of reducing expenditures so as to bring them within the appropriation for 1905, in a report made on February 23, estimated that \$100,000 would be made available for the General School Fund during the present year by the "difference in salaries of persons who have resigned from the system since June 30, 1904, whose positions have been filled by new Teachers." It would appear that a similar available asset will exist in 1906, and that the estimate for Davis Law increments for that year might be decreased to this extent. It is therefore recommended that a deduction of \$100,000 be made in this item.

#### To Fill Vacancies.

Item 3 of said schedule, aggregating \$336,450, is to provide a fund for paying the salaries of Teachers employed to fill vacancies existing in the elementary schools at the opening of the session in September, 1905, and consequently not included in the regular elementary school schedules covered in Item 1. Prior to September, 1905, such classes were in charge of substitutes.

The 1906 estimate to provide for vacancies in the elementary schools existing at the time the estimate was prepared, is as follows:

3 male Principals, 1 year, salary	<b>\$2,750 00</b>
I female Principal, I year, salary	1, <b>75</b> 0 <b>0</b> 0
50 male Teachers, 1 year, salary	1,005 00
345 female Teachers, 1 year, salary	68o oo
26 assistants to Principals, 1 year	1,600 00

It is to be noted that this estimate is composed of two items:	
For Principals and assistants to Principals	\$51,600 00
For regular Teachers	284,850 00

A corresponding item appeared for the first time in the estimate of the Department of Education for 1905, the amount asked to fill vacancies during that year being \$386,450. In explanation of these two items it is to be stated that they are the result of a mistaken measure of economy resorted to by the Board of Education in order to keep school expenditures within the appropriations made for 1904 and 1905.

Early in the year 1904, and again in April, 1905, the Board of Education began to fill vacancies as they occurred in the classrooms by the employment of substitute teachers instead of by the appointment of regular teachers. As a result of this policy, at the close of the term ending last June, there were 395 teachers receiving substitute's pay, although theoretically entitled to full compensation because they were filling regular positions in the elementary schools. By this method the difference between the substitute's pay and a regular teacher's pay was saved during the time which elapsed between the date of their employment and the end of the term, and also the two months' salary which regularly appointed teachers receive during the summer vacation. The compensation for substitutes allowed by the Department of Education is at the rate of \$2.50 per diem for female teachers and \$3 per diem for male teachers. The average regular compensation paid at the time of entering the school system is \$1,005 per annum to male teachers and \$680 per annum to female teachers. The amount saved in this way during the current year since January 1, 1905, probably approximates \$100,000.

It is to be deplored that this false measure of economy should have been adopted by the Department of Education, as it has worked injury to the schools and injustice to substitute teachers who are entitled to an appointment with the yearly salary as soon as vacancies occur. It is therefore recommended that the \$284,850 asked for class-room teachers in this item be granted in full. The remainder of the estimate, \$51,600, which is for principals and assistants to principals should be eliminated, because there is an excess of such supervisory officers in the schools at the present time, and existing vacancies may be filled by transfer.

#### To Provide for the Increase in Attendance.

Items 4 and 5 in said schedule are to provide new teachers for the estimated increase in the attendance in the elementary schools. These items aggregate \$593,881.25, a decrease of \$52,372.08 from the 1904 estimate for the same purpose. In calculating the probable expenditures for teachers due to increased attendance, the Board of Education makes two separate estimates, the first, Item 4, \$364,400, being to provide the cost of instruction for an estimated increase of 27,000 pupils from the time when the estimate was made up to December 31, 1905. The second estimate, Item 5,

\$229,481.21, is to provide for an estimated increase of 28,000 pupils during the year 1906. To provide for this increase in attendance it is estimated that the following additions to the teaching force will be needed:

	Salary.
4 male principals, one year	\$2,750 00
4 female principals, one year	1,750 00
72 male teachers, one year	1,005 00
363 female teachers, one year	68o oo
17 assistants to principals, one year	1,600 00
4 male principals, 9 months	2,750 00
3 female principals, 9 months	1,750 00
26 male teachers, 10 months	1,005 00
78 male teachers, 3½ months	1,005 00
129 female teachers, 10 months	68o oo
387 female teachers, 3½ months	68o oo
19 assistants to principals, 9 months	1,600 00
·	

Although the proposed expenditures during the year 1906 for increased registration in the schools are \$52,372.08 less than the proposed expenditures for the same purpose during 1905, it would appear that the 1906 estimate is larger than the increases during the current year, upon which it is based, would justify. At this writing the figures for the month of September have not yet been reported by the City Superintendent of Schools, but the registration on the first day of school indicates that the increase in registration will not be so large as was anticipated. It is exceedingly difficult to make accurate predictions concerning the probable increase in the school register from year to year, inasmuch as the percentage of increase in each September has varied since consolidation from 4.06 per cent. in 1900 to 7.20 per cent. in 1903. The facts now show that the 1905 estimate for this purpose was excessive. Concerning that estimate Superintendent Maxwell says in his last annual report under date of December 31, 1904:

"For the year 1905 the Board of Estimate and Apportionment has granted an amount less by over a million of dollars than was deemed necessary by the Board of Education when it prepared its Budget. In many quarters there has been very genuine fear lest the appropriation should not be sufficient to meet the expenses of next year. My own judgment is that, owing to the fact that it was not necessary to appoint as many new Teachers in September and October, 1904, as it was thought at the time the Budget was prepared in June, 1904, would be necessary, the appropriation will, with strict economy, suffice for the needs of the schools, provided the influx of new children in 1905 is not greater than it was in 1904."

Concerning the same estimate, the Committee on Finance, Board of Education, in a report submitted to that Board on February 6, 1905, presenting a proposed bill to amend the Charter so that the appropriation for the General School Fund may be based upon a per capita allowance for each pupil of the certified average attendance

and the probable increase, based upon that of the preceding year, commented as follows:

"The rates mentioned in the bill are calculated upon actual requirements of the present year, and, if in force when the appropriation for 1905 was asked for, would have called for \$433,950.27 less than the amount estimated at that time to be necessary by this Board, the excess having come from varying estimates made at the time of the increases expected to occur. On the other hand the amount would have been just sufficient to permit the unimpaired continuance of the system during the present year, as we now realize the necessities to be."

It would thus appear that the City Superintendent of Schools and the Finance Committee of the Board of Education agree that the estimate made for proposed expenditures during the year 1905, on account of increased attendance in the schools was too large. On February 23, 1905, the Special Committee appointed by the Board of Education to report a plan for apportioning the General School Fund for 1905, among the various objects of expenditure recommended that, in dividing the General School Fund, the proposed expenditures "for new Teachers in all schools and to include substitutes employed in place of vacancies and for promotion, be fixed at \$350,000, 'a reduction of \$413,524.66." The report was adopted, and this policy was pursued in apportioning the General School Fund for the current year, but it now appears that the reduction made was too great and, as a result, the Board of Education was compelled to save money through the questionable method of employing substitutes to fill regular positions.

Aside from the fact that the estimate for increased registration in general is too large, it contains one item of proposed expenditure which might be eliminated in its entirety by an advance in the organization of the elementary schools. It is acknowledged that there is an excess of Principals and heads of departments in the elementary schools of the City. As a means of reducing this excess the Board of Education has adopted the policy of consolidating two or more elementary schools existing under the same roof and putting them under a single management in order to avoid a duplication of supervisory services. In making such a consolidation it usually happens that the services of one Principal and one or more assistants or Clerks can be dispensed with. During the school year ending last July six schools were consolidated, with the result that expenditures for supervisory officers and clerical assistants were reduced \$11,940 per year. It is admitted that this plan renders the organization of the schools more effective, and produces more satisfactory results in every way, but it has not been put into effect as rapidly as conditions would justify, because of opposition from the Principals and Teachers concerned. If the same methods of concentration or centralization which are now eliminating waste in other lines of business were applied to the organization of the elementary schools, expenditures for Principals and assistants to Principals, including Clerks, could be reduced several hundred thousand dollars a year. While, of course, it is not possible to carry this work of consolidating schools to the full at once, because the services of Principals and assistants already in the

employ of the Board of Education cannot be dispensed with without adequate cause, still it is practicable to reduce the excess of such supervisory officers to the extent of the number of new appointees needed for such positions during the coming year.

As will be seen from the itemized statement given above, the proposed expenditures for Principals and assistants to Principals to provide for increased registration in all boroughs up to December 31, 1905, and during the year 1906 aggregates \$80,187.50, which amount might be eliminated.

In the light of the facts here stated concerning the 1906 estimate for increased registration, it is recommended that a deduction of \$80,187.50 be made from this item on the score of Principals and heads of departments, and an additional \$100,000 on the basis of the original estimate being too large, making a total of \$180,187.50.

#### Additional Compensation for Boys' and Mixed Classes.

Item 6 is for \$376,464 to provide additional compensation for female Teachers of boys' and mixed classes in the elementary schools at the rate of \$60 per annum, as per statute. The by-law of the Board of Education relating to mixed classes provides that in any class presided over by a female Teacher, in which the number of boys averages 40 per cent. of the total attendance, the Teacher is entitled to the same extra compensation as is received by a Teacher of a class composed entirely of boys. The pay-roll for May in 1905 shows that the number of female Teachers receiving additional compensation for teaching boys' and mixed classes was 2,421 in Manhattan, 523 in The Bronx, 1,974 in Brooklyn, 582 in Queens and 204 in Richmond, making a total of 5.704. In the estimate 10 per cent. is allowed for the average increase of 1906 over May, 1905.

Since the enactment of the Davis law entitling Teachers of mixed classes to additional compensation, the practice has arisen of so organizing the elementary schools as to secure this additional compensation for the largest possible number of Teachers, and thus more mixed classes existed in the schools than were necessary. Following upon the investigation of possible economies in the elementary schools last year, an effort was made by the Board of Superintendents to reorganize the schools in such a way as to dispense with unnecessary mixed classes, and the fact that the proposed expenditures for this purpose during the year 1906 are \$5,026 less than the corresponding estimate of last year shows that something has been accomplished in the way of effecting this reform, but, as stated in full in the detailed report on the administration of the elementary schools submitted herewith, the matter has not been systematically pursued. It is therefore recommended that \$25,000 be deducted from the estimated expenditures for additional compensation for Teachers of boys' and mixed classes in order that such expenditures may be eventually reduced to a minimum.

#### HIGH AND TRAINING SCHOOLS.

Items 7, 8, 9, 10, 11 and 12.

The amount asked for High and Training schools for 1906 aggregates \$1,996,050.62, as against an estimate of \$1,894,344.31 for the same schools for the year 1905, a net increase of \$101,706.31.

The increase or decrease in each case is as follows:

	Increase.	Decrease.
Item 7—For salaries of persons now employed	\$153,385 00	
Item 8—For Davis Law increments		\$269 85
and to provide for increased registration in both High and Training schools, and for promotions	• • • • • • •	51,408 84

The net increase in the proposed expenditures for High and Training schools during 1906 is only \$101,706.31, as against a proposed increase of \$566,228.94 in the estimate of 1905. The smaller increase is explained by the facts that the estimate for 1905 exceeded the actual needs of the schools, and that the opening of the new City College buildings has gone to attract pupils to the academic department of that institution who would otherwise have registered in the regular High schools. The actual disbursements for Secondary schools during the year ending December 31, 1904, as per the Board of Education statement, were \$1,598,829.96.

Although the 1906 estimate for these schools is in all probability too large, great caution should be exercised in reducing it, as the growth of the secondary schools in this City at the present time is unprecedented. The increased registration in these schools approximated 14 per cent. during the last school year, as against 5 per cent. in the Elementary schools.

Not having as yet made a detailed investigation of the High and Training schools, with a view to determining possible economies in their administration, your examiners are unable to make definite recommendations concerning the 1906 estimate for these schools.

#### THE TRUANT SCHOOLS.

Items 13 and 14 of said schedule are to provide money for paying the salaries of the nine teachers in the Truant schools of the City—\$2,760.75 for the school in Manhattan and \$7,595.50 for the one in Brooklyn, making a total of \$10,356.25. This is an increase of \$453.33 over the estimate for 1905.

Owing to recent legislation concerning compulsory education the demands on the Truant schools have been considerably increased, and it is therefore recommended that this estimate be granted in full.

#### SPECIAL BRANCHES.

Items 15, 16, 17 and 18 of the 1906 estimate are to provide salaries for special teachers of music, physical training, French, German and manual training, including drawing and constructive work, shop work, cooking and sewing in the Elementary schools. The proposed expenditures for this purpose are \$452,030.44, as against an estimate of \$447,022.07 for 1905, an increase of \$5,008.37. The expenditures for special teachers during the year ending December 31, 1904, as per Board of Education annual statement, aggregated \$368,056.17.

The estimate for special teachers for 1906 is composed of four items:

Item 15-For salaries of persons now employed	\$379,530 00
Item 16-For Davis Law increments	4,675 44
Item 17—To fill vacancies now existing in the corps of special teachers	19,900 00
Item 18—To provide for increased registration in the schools	47,925 <b>0</b> 0

There are 296 special Teachers now employed at salaries ranging from \$900 to \$2,160 per year. It is proposed to employ 87 additional special Teachers at salaries ranging from \$900 to \$1,200 per year, and one Assistant Director at \$2,500 per year to fill vacancies now existing in the corps and to provide for increased registration in the schools.

The corps of special Teachers already exceeds the needs of the schools, or would exceed them if Teachers were classified on the basis of their ability to teach all the special studies and special supervision confined to such Teachers as actually need it. Now that the course of study in the special branches has been simplified to an extent there is less need for special Teachers than before.

As the outcome of a detailed investigation of the whole problem of special supervision in the elementary schools, the results of which were submitted by you to the Board of Estimate and Apportionment in June, 1904, and a subsequent inquiry relating particularly to the school year ending June, 1905, the results of which are embodied in a report on possible economies in the elementary schools submitted herewith, it is recommended that the 1906 estimate for special Teachers be reduced \$150,000.

#### EVENING SCHOOLS.

(Items 19, 20, 21 and 22.)

For evening schools, both elementary and high, the estimate for 1906 is \$694.261 as against \$667,100 for 1905, an increase of \$27,161, of which \$15,000 is for paying the salaries of the Teachers in the new Evening High School for Men and Women, which has just been opened in the Morris High School Building.

The expenditures for evening schools during the year ending December 31, 1904, aggregated \$450,948.15, but it should be noted that during the first term of that year certain reductions were made in the number of sessions in these schools and in the

salaries paid to Teachers and Principals, on account of reduced appropriations for school purposes. Both the customary length of term and the former rates of compensation were restored in the fall of 1904 and have since been maintained.

The estimate for evening schools in detail is as follows:

	The estimate for evening schools in detail is as follows:
	Item 19-For salaries for all persons employed and to be employed in the
\$424,690 <b>00</b>	elementary evening schools during the present session
42,469 <b>00</b>	Item 20—For increased attendance in the elementary evening schools
	Item 21—For salaries for all persons employed and to be employed in the
207,820 <b>09</b>	evening high schools during the present session
19,28 <b>2 00</b>	Item 22-For increased attendance in evening high schools

Item 19. which constitutes the proposed expenditures for salaries of persons now employed or to be employed during the present session in the elementary schools, represents a decrease of 70 persons as compared with the total number actually employed during the session of 1904-1905. Item 21, which constitutes the proposed expenditures for salaries of persons now employed or to be employed in the high schools during the present session, represents an increase of only 73 persons over the high school corps employed for the 1904-1905 session.

The evening school estimate for increased attendance for 1905 was based upon an estimated increase of 20 per cent. in Manhattan and The Bronx and Brooklyn, and of 25 per cent. in Queens and Richmond, while the estimate for 1906 is based upon an estimated increase of only 10 per cent. The original estimate for this purpose, as made by District Superintendent Matthew J. Elgas, who is in charge of these schools, was upon the basis of a 20 per cent. increase, but it was reduced to 10 per cent. by the Board of Superintendents before it was submitted to the Board of Estimate and Apportionment. Dr. Elgas states that the actual increase in attendance in the evening schools during the last session approximates 17 per cent.

In the light of the facts here stated it is recommended that the 1906 estimate for evening schools be granted in full.

#### VACATION SCHOOLS, PLAYGROUNDS AND RECREATION CENTRES.

Items 23, 24, 25, 26 and 27 of the 1906 estimate constitute the proposed expenditures for vacation schools, playgrounds and recreation centres during the year 1906. The aggregate is \$208,218.50, as against an estimate of \$217,772 for the same schools for 1905.

Your 1904 inquiry concerning the cost of maintaining the school system disclosed the fact that extravagance and waste obtained in the management of these schools to a greater degree, possibly, than in any other division of the school system, and it has since resulted in a radical reform in the administration of these schools.

In his last annual report, City Superintendent Maxwell states that the per capita cost of the vacation schools for 1904 shows a reduction of \$2.22 from the cost of the preceding year; the per capita cost of the summer playgrounds a reduction of 73 cents over that of the preceding year, and the per capita cost of the recreation centres a reduction of 39 cents over that of the preceding year. These calculations are inaccurate, because his per capita costs for the year 1903 were based upon the total expenditures for these schools, including both the expenditures for salaries, which come from the General School Fund, and those for supplies, which come from the Special School Fund, while his per capita costs for 1904 were based upon expenditures for salaries alone.

Although the economies in the management of the vacation schools, playgrounds and recreation centres have not been so large as Superintendent Maxwell's figures would indicate, much has been accomplished. The financial statement for the Board of Education for the year ending December 31, 1904, shows that the amount expended for the vacation schools, playgrounds and recreation centres during that year was \$147,468.97, as against an estimate of \$309,079 made by the Department of Education as the amount needed for that purpose during the said year. The economies were effected for the most part by dispensing with superfluous Teachers, closing recreation centres when the attendance no longer justified their being kept open, and checking waste in the use of the various materials provided for the summer schools.

The 1906 estimate in detail is as follows:

Item 23—For vacation schools	\$71,314 50
Item 24—For vacation playgrounds	50,020 00
Item 25—For playgrounds for mothers and babies	2,880.00
Item 26—For evening recreation centres	76,356 oo
Item 27—For baths	5,648 00

Two new items appear in this estimate. Item 25 is to provide salaries for 30 kindergartners and pianists to take charge of playgrounds to be established for mothers and babies. Item 27 is to provide salaries for 8 Swimming Teachers.

Inasmuch as the 1906 estimate for these schools is conservative, and considering the facts above stated, it is recommended that no deductions be made.

#### GENERAL SUPERVISION.

Items 28, 29, 30 and 31 of said schedule are to provide funds for paying the salaries of the Board of Superintendents, the District Superintendents, the Board of Examiners and for Supervisors, Directors et al. There is no material change in the proposed expenditures for general supervision in the schools, the 1906 estimate for this purpose being \$267,800, as against \$266,433.33 for 1905. The actual disbursements for general supervision in the elementary schools for the year ending December 31, 1904, as shown by the Board of Education annual statement, aggregated \$271,300.97—

\$7,187,43 of this amount having been expended for the purpose of hiring extra Examiners.

There are eight Associate Superintendents and twenty-six District Superintendents, as provided in the Charter, whose salaries aggregate \$182,500. The Board of Examiners is composed of four members, who receive \$5,000 each. The remaining \$65,300 is for the twenty-two Directors, Supervisors and Inspectors of special branches, kindergartens, playgrounds, etc., whose salaries range from \$2,500 to \$4,000 each. All salaries included in this item are fixed and regulated by the Board of Education, but they do not appear excessive when viewed in the light of the responsibilities involved. It is recommended that the estimate for general supervision be granted in full.

#### ATTENDANCE OFFICERS.

Items 32 and 33 are to provide money for paying salaries of the Attendance Officers whose work is to enforce the Compulsory Education Law. The proposed expenditures for the salaries of the present corps are \$83,700. Twelve additional officers for evening school purposes and work among newsboys are proposed at an estimated cost of \$12,300, making a total estimate of \$96,000, as against \$91,950 for this purpose in 1905. The expenditures for Attendance Officers for the year ending December 31, 1904, as per Board of Education annual statement, aggregated \$81,101.34.

The present corps consists of 30 officers at \$1,200 each, 3 officers at \$1,050 each and I officer at \$900, for Manhattan and The Bronx; 19 officers at \$1,200 each, 3 officers at \$1,050 each and I officer at \$900, for Brooklyn; 8 officers at \$1,200 each, for Queens; 3 officers at \$1,200 each, and 4 officers at \$900 each, for Richmond, making a total of 72 officers for the five boroughs. It is recommended that \$83,700, an amount necessary to pay the present corps, be allowed for the year 1906, no appropriation for additional officers being allowed.

#### CORPORATE SCHOOLS.

There are 26 corporate schools—orphan asylums and industrial schools—which receive a share of the General School Fund, item 34 of the 1906 estimate, aggregating \$300,000, being to provide money for paying salaries of Teachers in these schools. This estimate is based upon an estimated average daily attendance of 15,800 pupils in Manhattan, and 4,200 pupils in Brooklyn, at \$15 per pupil, and calls for the same amount as the corresponding estimate for last year.

The expenditures for corporate schools during the year ending December 31, 1904, as per Board of Education annual statement, were \$280,950. It is recommended that this estimate be granted in full.

#### LECTURERS' FEES.

Item 35, aggregating \$81,000, is for the payment of fees to persons to be employed to deliver lectures in the evening lecture courses which are maintained by the Department of Education in the several boroughs of the City. The average price paid for such

service is \$15 per night, and the number of lectures proposed in 1906 is 2,500 in Manhattan, 400 in The Bronx, 1,800 in Brooklyn, 500 in Queens and 200 in Richmond, making a total of 5,400 lectures.

The estimate for this purpose has been the same for several years past, no increase being asked. The expenditures for Lecturers' fees, as per Board of Education annual statement, were \$63,850.56 during the calendar year ending December 31, 1903, but during the year ending December 31, 1904, such expenditures were decreased to \$55.422.12 on account of reduced appropriations for school purposes, and it is claimed that the evening lecture work suffered in consequence.

It is, of course, an open question whether adult education is a legitimate item of public school expenditure, but if the evening lecture centres are to be continued the appropriation asked for this purpose should be granted in full, as the estimate does not exceed the actual needs of this division of public school work.

#### SUBSTITUTES.

Item 36 of the 1906 estimate is to provide for the payment of substitutes and per diem Teachers. The proposed expenditures for this purpose are \$400,702.02 as against an estimate of \$299,884.23 for 1905, an increase of \$100,817.79.

The estimate is made up as follows:

The estimate is made up as follows:		
The cost of regular substitutes in place of absentees from January 1 to June 20, 1905, 113 school days, or \$133,-783.03; the cost on the same basis for entire 193 school days of 1905 will be		
The cost of special substitutes from the Teachers' training schools, from January 1 to June 30, 1905, 121 school days, or \$30,062.01; cost on same basis for entire 193		
school days of 1905 will be	\$276 445	48
Add 10 per cent. for average increase of 1906		
Making a total of	\$304.090	— 02
There are at present 166 substitute Teachers employed as Clerks. This will cost for 195 school days in 1906, at \$3 per diem	96,612	00
	\$400,702	02
		=

The increase in the 1906 estimate is mainly due to the fact that about one-half of the Clerks in the elementary schools are now paid out of this fund, whereas such service was formerly performed by Teachers on the regular salary list which is provided for in Item 1 of the schedule.

Inasmuch as this estimate for substitutes and per diem Teachers is based upon actual expenditures for substitute services from January 1, 1905, to June 20, 1905, during which time more substitutes than are ordinarily needed were employed, owing to the policy already described of hiring substitutes to fill vacancies instead of employing regular teachers, it would seem to be excessive, and it is therefore recommended that it be reduced \$50,000.

#### JAMAICA STATE NORMAL SCHOOL.

Item 37 of said schedule, aggregating \$52,500, is for proposed expenditures for salaries of the Principal and thirty-one Teachers of the Jamaica State Normal School, which, under the provisions of chapter 524 of the Laws of 1905, "shall be transferred and conveyed to The City of New York for the use of the said City as a training school and public school on the first day of January, 1906."

This statute also provides that the Principal, Teachers, Janitor and other employees of the said school shall be transferred from the service of the State to the service of the City in the respective positions to which they have been appointed, and shall be entitled to such compensation as is now provided, or may hereafter be provided, for similar positions in the schools of The City of New York by the lawful authority, and that provision for the maintenance of said school and the payment of salaries shall be made by the Board of Estimate and Apportionment in the Budget for 1906.

The proposed expenditures for this school appear to be mandatory, and it is therefore recommended that the estimate be granted in full.

#### RECAPITULATION.

A summary of the estimates for 1906 and the appropriations recommended is given herewith:

General School Fund, 1906.

	Estimate.	Appropriation Recommended.
Elementary Schools.	,	•
Item 1. Salaries, Teachers now employed	\$13,344,825 00	\$13,249,369 00
Item 2. Davis Law increments	193,427 39	93,427 39
Item 3. To fill vacancies	336,450 00	284,850 00
Items 4 and 5. To provide for increased registration	593,881 25	413,693 75
Item 6. Additional compensation for Teachers of mixed classes	376,464 00	351,464 aa
High and Training Schools.		
Items 7, 8, 9, 10, 11 and 12. Salaries, for all purposes	1,996,050 62	1.996,050 62
Truant Schools.		
Items 13 and 14. Salaries	10,356 25	10,356 25

	Estimate.	Appropriation Recommended.
Special Branches.		
Items 15, 16, 17 and 18. Salaries of Teachers employed and to be employed	452,030 44	302,030 44
Evening Schools.		
Items 19, 20, 21 and 22. Salaries of Teachers in High and Elementary Schools	694,261 00	694,261 00
Vacation Schools, Playgrounds and Recreation Centres.		
Items 23, 24, 25, 26 and 27. Salaries of Instructors, Attendants, etc.	208,218 50	208,218 50
General Supervision.		
Items 28, 29, 30 and 31. Salaries of Superintendents, Examiners, Supervisors et al	267,800 00	267,800 00
Attendance Officers.		
Item 32. Salaries of present corps	83,700 00	83,700 00
Item 33. Additional officers	12,300 00	••••••
Item 34. For tuition of pupils	300,000 00	300,000 00
Item 35. Lecturers' fees	81,000 00	81,000 00
Substitute Teachers.		
Item 36. For substitute and per diem Teachers	400,702 02	350,702 02
Jamaica Normal School.		
Item 37. Salaries, Principal and Teachers	52,500 00	52,500 00
Total	\$19,403,966 47	\$18,739,422 97
SUMMARY OF GENERAL SCHOOL FUND, RECOMMENDED APPROPRIATION, SHOW OF \$955,554.23. The amount that would be available for the purposes of	•	
eral School Fund during 1906 in the event of the app	proval by	
the Board of Estimate and Apportionment of the reco	mmenda-	
tions made in this report would be	\$1	8,739,422 97
The sum appropriated for the General School Fund for 190	05 aggre-	
gates	<b>1</b>	7,783,868 74
The increase recommended is	•••••	\$955,554 23

#### SPECIAL SCHOOL FUND.

The Special School Fund estimate for 1906 aggregates \$5,722,074.49. This estimate exceeds the amount appropriated and made available for the year 1905 by \$1,508,925.46. It exceeds the estimate for the year 1905 by \$218,709.14. The total expenditures from the 1904 Special School Fund Account up to June 30, 1905, aggregate \$4,125,051.43.

A summary of the Special School Fund estimates, appropriations with transfers, and expenditures from 1903 to 1906, inclusive, showing increases and decreases, will be found in the synopsis of school funds, both General and Special Accounts, given at the beginning of this report.

In analyzing the figures contained in the Special School Fund estimate it has been found practicable to make a full comparison between the 1906 estimates and the estimates, appropriations and expenditures of previous years, because specific amounts are allowed by the Board of Estimate and Apportionment for the several items of Special School Fund expenditure and separate accounts are kept of the disbursements for each item. Transfers to and from the different accounts are made from time to time, and the amount considered in this examination in each case is the net amount available for the use indicated in the title of the account.

The Special School Fund for 1906 is composed of twenty separate items, a schedule of which is given herewith, together with allied data concerning the estimates, amounts available and expenditures for each item from 1903 to 1905, inclusive.

# SCHEDULE

# Summary of Special

Item No.	. Title of Account.	Estimate of Board of Education for 1903.	priation and Amounts Made	1903 Account Expenditures, as Per De- partment of Finance Books, June 30, 1905.	Estimate of Board of Education for 1904.	1904 Appropriation and Amounts Made Available by Transfers to June 30, 1905.
ı.	Supplies	\$1,219,542 98	\$1,037,116 35	\$1,015,465 89	\$1,607,916 89	\$1,203,180 91
2.	General Repairs	1.767,187 81	1,012,226 80	1,005,164 49	1,489,382 71	687,469 53
3.	Furniture and Repairs of	158,341 51	137,572 70	135,703 51	216,823 17	134,700, 00
4.	Pianos and Repairs of	33,350 00	19,400 00	18,939 41	39,390 00	19,850 00
5.	Fire Alarms	49,618 59	1,100 50	790 50	47,571 00	4,293 80
6.	Fuel	512,114 70	453,208 47	452,267 87	594,186 13	525,152 77
7.	Rents	133,530 00	123,621 51	121,583 86	165,816 00	117,752 95
8.	Compulsory Education	25,580 00	22,470 57	16,725 70	31,200 00	35,580 00
9.	Transportation	19,000 00	16,956 10	16,171 87	20,000 00	24,784 45
10. 11.	Water Salaries—Officers, Clerks	2,400 00	4,017 92	3,397 92	3,500 00	3,317 92
11.	and other Employees.	301,440 00	304,790 00	304,647 33	326,020 00	301,440 00
	School	36,810 00	34.810 00	34,394 87	41,974 20	36,279 85
13.	Incidental and General Expense Fund Heat, Light and Power,	71,936 10	144,792 40	144,129 55	98,750 00	97,936 10
14.	Hall of Board of Ed- ucation	7,225 00	4,425 00	4,395 85	7,950 00	7,225 00
15.	School Libraries	24,369 28	22,184 50	22,184 50	21,530 15	21,530 15
16.	Libraries and Apparatus, Regent Schools	7,250 00	7,250 00	7,250 00	7,250 00	7,250 00
17.	Salaries of Janitors of All Schools	853,052 13	856,693 77	856,397 22	1,183,537 50	945,702 12
18. 19.	Lectures Support of Jamaica Nor-	82,700 00	75:200 00	74,358 58	82,700 00	72,500 00
20.	To Purchase Gasoline	•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •
21.	Runabouts Expenses for Recreation	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • •
	in Schools	25,000 00	10,815 50	10,161 86	10,000 00	10,000 00
	Totals of Estimates	\$5,330,448 19	<del></del>		<b>\$5,995,497</b> 75	
	Totals of Appropriations Totals of Expenditures to June 30, 1905	•••••	\$4,288,652 08			\$4.255.945 55
				\$4,244,130 78		
	Total Increases			· · · · · · · · · · · · · · · · · · ·		
	Total Decreases					
	Net Increase					

## School Fund, 1903 to 1906.

1904 Account Expenditures as per Depart- ment of Finance Books June 30, 1905.	Education for 1905.	1905 Appropriation and Amounts Made Available by Transfers to June 30, 1905.	Estimate of Board of Education for 1906.	Increase. Decrease. Compared with Estimate for 1905.	Increase. Decrease. As Compared with Appropriation and Amounts Made Available by Transfers for 1905.
\$1,162,694 43	\$1,423,938 90	\$1,188,000 00	\$1,449,423 50	\$25,484 60	\$261,423 50
668,615 11	1,191,126 40	641,126 40	1,185,247 74	\$5,878 66	5 544,121 34
125,194 35	202,360 50	127,360 50	214,158 00	11,797 50	86,797 50
15,872 88	19,099 00	14,099 00	28,900 00	9,801 00	14,801 00
3,918 30	37,300 00	1,300 00	2,500 00	34,800 00	1,200 00
499,253 56	461,988 00	453,387 00	451,863 35	10,124 65	\$1,523 65
117,752 67	133,266 00	133,266 00	112.539 00	20,727 00	20,727 00
34,130 75	33,750 00	37,750 00	83,500 00	49,750 00	45,750 00
24,544 42	39,330 85	30,330 85	45,504 co	15,173 15	15,173 15
1,276 89	2,400 00	2,400 00	2,400 00		
298,634 82	331,540 00	316,540 00	353,350 00	21,810 00	36,810 00
36,165 18	54,591 00	52,000 00	45,567 co	9,024 00	6,433 00
97,645 97	100,000 00	75,000 00	112,127 00	12,127 00	37,127 00
3,684 55	7,950 00	7,950 00	7.950 00		
21,530 15	21,530 15	21,530 15	26,824 00	5,293 85	5,293 85
7,250 00	7,250 00	7,250 60	8,750 00	1,500 00	1,500 00
926,582 42	1,352,244 55	1,036,159 13	1,497,870 90	145,628 35	461,711 77
70,304 98	82,700 00	67,700 00	82,700 00		15,000 00
• • • • • • • • • • • • • • • • • • • •	• • • • • • •		7,900 00	7,900 00	7,900 00
			3,000 00	3,000 00	3,000 00
10,000 00	10,000 00			••••••	
	\$5,503,365 35		\$5,722,074 49		
	• • • • • • • • • • • • • • • • • • • •	\$4.213,149 03	• • • • • • • •		
\$4,125,051 43			•••••		
				\$309,266 45	\$1,537,609 11
			•••••	\$80,554 31	\$28,683 65
				\$228,712 14	31,508,925 46

## SCHOOL SUPPLIES.

The first account in the Special School Fund is that of school supplies, including books and stationery, drawing and other manual training materials, kindergarten supplies, janitors' supplies, school records and numerous other miscellaneous articles which are needed in connection with the work of the schools. The sum of \$1,449,-423.50 is asked for this purpose for the year 1906, which estimate compares with the estimate and amount made available for last year, as follows:

estimate and amount made available for last year, as follows:		
Amount asked for 1906	51,449,423 5	ю
Amount asked for 1905		
Increase 1906 over 1905	\$25,484 6	io
Amount asked for 1906	\$1,449,423 5	;o
Amount allowed for 1905\$1,200,000 00		
Less amount transferred to Compulsory Education Fund 12,000 00		
Amount available for supplies for 1905	1,188,000 0	ю
Increase for 1906 over amount available for 1905	<b>\$2</b> 61,423 5	- ;o =
The increase of \$261,423.50 over the amount available for the current y for the following purposes:	ear is aske	d
33,350 new sittings, at \$4.01 per pupil	\$133,733 5	50
2,600 new sittings (Stuyvesant High School), at \$10 each	26,000 0	ю
600 new sittings (Training School, Brooklyn), at \$6 each	<b>3,60</b> 0 0	ю
22 kindergartens to be opened, at \$200 each	4,400 0	ю
39 kitchens to be opened, at \$359 each	13,650 o	ю
36 workshops to be opened, at \$900 each	32,400 0	ю
Extra supplies for vacation schools and playgrounds	11,000 0	ю
Estimated probable increase in attendance, old schools, 2,800 pupils, at	•	
\$1.38 per pupil	36,640 o	ю
Total	\$26x 400 #	_

It is proposed to open 5 new school buildings in Manhattan, 3 in The Bronx, 7 in Brooklyn, 2 in Queens and 1 in Richmond, having a total seating capacity for 33,350 pupils, who are to be provided with books and other school supplies, including maps, globes, records and office supplies, at an estimated cost of \$4.01 per pupil. It is stated that this estimate is based upon the minimum requirements for new schools during the year 1906, and that unless the \$133,733.50 asked for this purpose is allowed, it will be impossible to provide new schools with the supplies needed.

The new Stuyvesant High School is to have a manual training course, and the proposed expenditure per pupil for that school is therefore \$10, as against \$6 in regular high schools. The machinery, tools and other supplies needed for manual training work involve additional expense.

The expenditures for supplies for the vacation schools and playgrounds during the current year aggregate \$34,000, which amount is included in the \$1,188,000. An additional \$11,000 is asked for this purpose for 1906.

It is to be noted that the smaller increase in the estimate for school supplies for 1906, as compared with that for 1905, is due largely to the far-reaching economies which have been effected in the purchase and distribution of supplies by the Board of Education since January, 1904. The revision of the course of study also tends to lessen expenditures for supplies of various kinds, particuarly the various materials used in the several lines of manual training work.

The disbursements for school supplies from the 1904 account aggregate \$1,162,-694.43, as against \$1,015,465.89 from the 1903 account, an increase of \$147,228.54.

On account of the large number of new schools to be opened during the coming year it is recommended that an increase of \$186,423.50 over the amount available for 1905 be allowed for the year 1906, making a total appropriation of \$1,374,423.50, this amount being a reduction of \$75,000 in the amount asked for by the Board of Education.

Note—In view of the establishment of a central depository for the receipt and distribution of supplies for the entire City, it is no longer practicable to maintain a separate stock for each borough. The Board of Education has therefore requested the Board of Estimate and Apportionment to make the appropriation for supplies in one fund, for uniform use throughout the City, instead of apportioning it to the several boroughs. Your examiners concur in the opinion that it is necessary and expedient, on the score of economy and efficiency of administration, to consolidate the supply accounts of the several boroughs, but it would seem that such a change cannot be made without legislation at Albany. Section 1060 of the Charter specifies that "it shall be the duty of the Board of Estimate and Apportionment and of the Board of Aldermen to indicate in the Budget in raising the Special School Fund, the respective amounts thereof which shall be available for use in the several boroughs."

## GENERAL REPAIRS.

## Item 2.

The largest item under the Special School Fund estimate is to provide money for repairing school buildings, including the sanitary fixtures and the heating and electric apparatus. As there is no contingent fund to provide for accidents to school fittings or other emergencies all such expenditures come under this account.

The follows:	1906	estin	nate	for	genera	l repairs	aggregate	s \$1,185,247.74.	It is	made up	as
General :	repair	·s	. <b></b> .							\$648,531	00
Sanitary										114,065	00
Heating				<b>.</b>			• • • • • • • • • •			185,1 <b>7</b> 6	00
Electric										74,774	00
Salaries						• • • • • • • •		• • • • • • • • • • • • • • • • • • • •		162,701	74
	Т	otal.	· • • • •	• • • •			• · · · · · · · · · · · · · · · · · · ·		• • • • • •	\$1,185,247	74

The proposed expenditures for salaries are to pay Inspectors of Repairs, Inspectors of Masons' Materials, Sanitary Inspectors, Heating and Ventilating Inspectors, Machinists, Architectural and Mechanical Draughtsmen, Painters, Plumbers, Carpenters, etc., of whom there are ninety-three now employed at salaries ranging from \$521.67 to \$2,550. The salary list for July, 1905, aggregates \$142,711.48. It is proposed to increase this list \$19,990.26, the increase being mainly for Inspectors of Repairs, Sanitary Inspectors, Heating and Ventilating Inspectors, Architectural Draughtsmen, Machinists, etc., in Brooklyn and Queens.

The 1906 estimate represents a decrease of \$5,878.66 from the 1905 estimate for the same purpose and an increase of \$544,121.34 over the appropriation and amounts made available by transfer for general repairs for the same year.

The expenditures from the 1904 account for general repairs, as per Department of Finance books June 30, 1905, aggregate \$668,615.11.

Expenditures for betterments usually come out of the General Repair Fund, but during the past two years some of the betterments have been paid for by the issue of Corporate Stock. It is recommended that a deduction of \$500,000 be made in the 1906 estimate for general repairs, this deduction to be provided for in Corporate Stock issue, and that a further deduction of \$25,000 be made on the score that the proposed expenditures for salaries of Inspectors, Draughtsmen, etc., appear to be excessive.

## FURNITURE AND REPAIRS.

Item 3 of the estimate for 1906 is to provide money for the purchase of new furniture for the schools and for the repair of furniture now in use. The amount asked for this purpose is \$214,158, this amount being an increase of \$11,797.50 over the corresponding estimate for 1905 and an increase of \$86,797.50 over the amount available for this purpose during that year.

The 1906 estimate is made up of a proposed expenditure of \$200,542.50 for furniture and \$13,615.50 for salaries, the latter amount being an increase of \$1,825.83 over the salary list for July, 1905.

The expenditures from the 1904 account for furniture and repairs, as per Department of Finance books June 30, 1905, aggregate \$125,194.35. It is recommended that

\$164,158 be allowed for this purpose for 1906, this amount being a deduction of \$50,000 in the original estimate.

## PIANOS AND REPAIRS OF.

Item 4 of the schedule is to provide for the repair of pianos now in the schools and for the purchase of new instruments. The proposed expenditures for this purpose for the year 1906 are \$28,900, as against \$14,099, which is the amount made available for that purpose during the current year, an increase of \$14,801.

The estimate for 1905 for pianos and repairs of was \$19,099, which amount is \$9,801 less than the estimate for 1906. The 1906 estimate in detail is as follows:

Borough of Manhattan—		
22 square pianos	\$5,500.00	
8 upright pianos	2,000 00	
Tuning, repairs, etc	1,000 00	
Borough of The Bronx—		\$8,500 00
6 square pianos	\$1,500 00	
6 upright pianos	1,500 00	
Tuning, repairs, etc	500 00	
Borough of Brooklyn—		3.500 00
16 square pianos	\$4.000 00	
10 upright pianos	2,500 00	
Tuning, repairs, etc	2,000 00	
runnig, repairs, etc	2,000 00	8,500 00
Borough of Queens—		0,500 00
6 square pianos	\$1,500 00	
15 upright pianos	3.750 00	
funing, repairs, etc	650 <b>o</b> o	
Borough of Richmond—		5,900 00
4 square pianos	\$1,000 00	
4 upright pianos	1,000 00	
Tuning, repairs, etc	500 00	
		2,500 00
•	-	
Total		\$28,900 00

As will be seen from the above, it is proposed to purchase 97 new instruments during the coming year, about one-fifth as many as there are school buildings in the entire city.

It is recommended that \$18,900 be appropriated for this purpose, a deduction of \$10,000 from the estimate.

#### FIRE ALARM.

Item 5 of this schedule, amounting to \$2,500, is to provide for general repairs to the present connections for fire alarms in the school buildings of four boroughs, no appropriation being asked for Richmond. The estimate in detail is:

Manhattan	\$800 00
The Bronx	200 00
Brooklyn	1,000 00
Queens	500 00

The amount made available for fire alarms for the year 1905 was \$1,300. The Department of Finance books show that \$3,918.30 had been expended for fire alarms from the 1904 account on June 30 of this year.

It is recommended that the 1906 estimate for this purpose be granted in Jull.

#### FUEL.

The amount asked for fuel for 1906 (Item 6 of the schedule) aggregates \$451,863.35, as against an estimate of \$461,988 for 1905 and of \$594,186.13 for 1904 for the same purpose. Notwithstanding the growth of the school system, the 1906 estimate for fuel is \$60,251.35 less than the corresponding estimate for 1903.

The estimate for 1906 is for 81,720 tons of coal and 1,240 cords of wood at an aggregate cost of \$451,863.35. This includes 8,160 tons of coal and 166 cords of wood for the new schools to be opened during the year. The estimate for the several boroughs is as follows:

Manhattan	\$192,661 75
The Bronx	51,601 60
Brooklyn	140 <b>,442 0</b> 0
Queens	46,308 <b>0</b> 0
Richmond	20,850 00

The expenditures for fuel, as per Department of Finance books on June 30, 1905, aggregate \$452,267.87 from 1903 account, and \$499,253.56 from the 1904 account.

The appropriations and amounts made available for fuel in 1904 aggregate \$525,-152.77 and for 1905, up to June 30, the amount made available is \$453,387.

It is to be noted that the estimate for fuel for 1906 is \$1,523.65 less than the amount made available for this purpose during the current year. This is to be explained for the most part by the fact that large economies have been effected in the purchase, delivery and consumption of fuel in the schools of the City during the past two years by the Committee on Supplies (Board of Education), in conjunction with Mr. Patrick Jones, the Superintendent of Supplies.

It is recommended that the original estimate, \$451,863.35, be granted.

#### RENTS.

Item 7 of said schedule is to provide money for paying rents for buildings used for school purposes during 1906. The estimate aggregates \$112,539, as against a corresponding estimate and amount made available of \$133,266 for the same purpose last year, a decrease of \$20,727. The estimate is made up as follows:

Manhattan	
The Bronx	12,650 00
Brooklyn	25,750 00
Queens	12,948 00
Richmond	
Board of Education	8,340 00

The expenditures for rents from the 1904 account, as per Department of Finance books June 30, 1905, aggregated \$117,752.67. It is recommended that the estimate be granted in full.

#### COMPULSORY EDUCATION.

Item 8 of the 1906 estimate aggregating \$83,500, as against an estimate of \$33,750 for the year 1905, is for compulsory education. It is to provide money for the maintenance of truants in the two truant schools under the jurisdiction of the Board of Education and in other institutions to which truants are committed because they cannot be accommodated in these schools. The estimate includes expenditures for food, clothing, bedding, medicine and physicians' fees, laundry, etc., for truants, together with car-fare for Truant Officers and the cost of such printed matter as is needed by the District Superintendents in enforcing the compulsory education law.

The appropriation made by the Board of Estimate and Apportionment for compulsory education in 1905 was \$25,750, which appropriation proved inadequate to meet the needs of this department of school work during the current year. A transfer of \$12,000 has already been made to this account, and Superintendent Jones states that bills and requisitions are now being held awaiting another transfer of \$12,000, making known liabilities at the present time for the year 1905 aggregate \$49,750. As will be seen from Schedule "C" the expenditures for compulsory education from the 1904 account, as per Department of Finance books June 30, 1905, aggregate \$34,130.75.

The 1906 estimate includes an item of \$25,000 for the support and maintenance of the new parental school for which plans have been made, but as yet no contract let. Although expenditures for compulsory education have increased greatly during the last two years owing to the larger responsibilities of the Board of Education under the new compulsory education law, the child labor statutes and the newsboy law, still it would appear that the estimate for this purpose for the year 1906 is excessive, and it is therefore recommended that a deduction of \$25,000 be made, the amount allowed being \$58,500.

#### TRANSPORTATION.

Instead of establishing branch schools in outlying districts, where the population does not seem to justify such outlay, the Department of Education has adopted the policy of conveying pupils to schools already established by means of stages and trolley cars. The proposed expenditures for transportation (Item 9 of the schedule) for the year 1906 are \$45,504, as against an estimate and an amount available of \$30,330.85 for the year 1905, an increase of \$15,173.15.

In explanation of this increase the Department of Education states that a stage will be required for crippled children in the Borough of Manhattan, the number of which is unknown. This stage requires an additional trained man to carry the children. In the Borough of The Bronx the average cost per day per stage for 1905 was \$4.48, while the 1906 calculations are based upon an average price of \$5 per day, which is the average price of all bids received for this borough for the year 1905. In the Borough of Brooklyn there will be an increased number of pupils to be carried during 1906, and two additional stages will be required for each of the boroughs of Queens and Richmond. The expenditures for transportation during the year 1904, as per Department of Finance books June 30, 1905, aggregated \$25,544.42.

The liabilities for transportation to June 30, 1905, show that the amount appropriated for this purpose for the current year will not be sufficient, and that a transfer of \$2,983.90 will have to be made to the Transportation Account to meet the estimated liabilities for the balance of the year, making the amount expended and estimated liabilities for 1905 aggregate \$33,314.75. In the light of these facts it is recommended that the appropriation for transportation for the year 1906 be fixed at \$40,000, this amount being a deduction of \$5,504 in the original estimate.

#### WATER.

The proposed expenditures for water during the year 1906 (Item 10), are \$500 for The Bronx, \$200 for Brooklyn, \$1,200 for Queens and \$500 for Richmond, a total of \$2,400. This estimate is the same as the estimate for 1905, and the amount made available for that year. The expenditures for water from the 1904 account, as per Department of Finance books June 30, 1905, aggregated \$1,276.89, as against an expenditure of \$3,397.92 from the 1903 account for the same purpose. It is recommended that the estimate for 1906 be granted.

## SALARIES OF OFFICERS, CLERKS AND OTHER EMPLOYEES.

Item 11 of the schedule is to provide money for paying the salaries of officers, Clerks and other employees in the different offices of the Board of Education. The estimate for 1906, aggregating \$353,350 is made up as follows:

Number of Employees.		Proposed Salaries for 1906.	Increase.	
30	Secretary's Office	\$40,610 00	\$4,550 00	
88	Bureau of Supplies	96,060 00	6,350 00	
58	City Superintendent's Office	68,980 00	4,740 00	
40	Building Bureau	68,750 00	3,480 00	
34	Bureau of Audit and Accounts	44,020 00	3,940 00	
6	Lecture Bureau	. 6,330 00	600 00	
24	Clerks to District Superintendents	17,550 00	3,150 00	
29	Employees in Truant Schools	11,050 00		
309		\$353,350 00	\$26,810 00	

The increase is mainly due to the fact that it is proposed to add thirteen additional employees—four in the Secretary's office, four in the City Superintendent's Bureau, two in the Building Bureau and three in the Bureau of Audit and Accounts.

The expenditures for salaries of officers and Clerks and other employees from the 1904 account, aggregate \$298,634.82. It is recommended that \$333,350 be allowed for this purpose for 1906, a deduction of \$20,000 in the estimate.

## NAUTICAL SCHOOL.

The 1906 estimate for the support of the Nautical School (Item 12 of the schedule), aggregates \$45,567, as against an appropriation of \$52,000 for the year 1905, a decrease of \$6,433. The appropriation for 1905 was an increase of \$15,720.15 over the appropriation for the previous year, the major part of the increase being allowed for the purpose of overhauling the schoolship "St. Mary's."

The estimate in detail is as follows:

For Superintendent, Executive Officer, Instructors and Surgeon.....

For wages of the crew ......

For wages of the crew	12,480 00
For provisions—	
Officers' cabin, \$2 per day	730 00
Officers' ward-room, \$1 per day	1,460 00
Crew, 26 men and 100 boys, at 30 cents per day	13,797 00
Sundry expenses, ship chandlery	3,000 00
Summer cruise	3,000 00
Contingencies	500 00
General repairs for boats	1,200 00

\$45,567 00

\$9,400 00

It is recommended that \$43,000 be appropriated for the support of the Nautical School during the year 1906.

## INCIDENTAL AND GENERAL EXPENSE FUND.

Item 13 of the 1906 estimate deals with the general expense account of the Board of Education. The amount asked for this purpose is \$112,127, as against \$75,000, which is the amount made available for this account during the current year, an increase of \$37,127. The expenditures from this fund for 1904, as per Department of Finance books, aggregate \$97,645.97.

The proposed expenditures for 1906 are as follows:		
Printing, Binding and indexing Minutes of the Board of		
Education and its Committees and Board of Superin-		
tendents	\$16,811	μο
Manual and Directories for use of the Board of Education,		
Principals, etc	3,875	ю
Annual Report of the Board of Education	980 (	00
Special Manila Stamped Envelopes for use of Board of Health		
purposes	4,500 (	00
Special Envelopes, addressed to each school	2,500 (	ю
Telephones	14,722 2	<b>2</b> 4
Messenger Service, Telegrams, suppers, carfares, etc., etc	15,646 (	i9
General Stationery and Supplies	26,443	6
Postage Stamps	6,435	98
Syllabi and Question Papers and other Papers for Board of		
Superintendents	2,875	8
Stamped Envelopes for use in City Superintendent's Office.	3,681 2	4
Proposals for Supplies, etc., etc	4,695 5	· ·
Repairs to Depositories, Salaries of Temporary Employees,		
etc., etc	8,960 7	ı
Total		- . \$112,127 00
By analyzing the foregoing it will be found that the Printing and Supplies which includes the Manuals of the Board of Education and Superintendents, Directories and Blanks of all kinds necessary for use in the Department of Edu-		
cation, that it will cost	<b>\$66,3</b> 61 3	8
The estimated cost of Telephones amount to	14,722 2	4
Showing that, of the amount asked, there will be required for Printing, Printed Supplies, Stamped Envelopes and Tele-		_
phones alone	\$81,083 6	2
Postage Stamps will cost	6,435 9	8
_		- 87,519 60

It is stated that the amount asked for 1906 is very conservative and that the amount allowed for the year 1905, namely, \$75,000, will not meet the requirements of the Department of Education during the current year.

It is recommended that an appropriation of \$100,000 be made for this account for the year 1906, a reduction of \$12,127 in the original estimate.

## SCHOOL LIBRARIES AND APPARATUS.

Items 15 and 16.

In order to take advantage of the State distribution of the Public School Library Fund, it is necessary for the City to appropriate and expend an equal sum. The estimate asked for this purpose for 1906 (Item 15) is \$26,824, an increase of \$5,293.85 over the estimate for 1905 and the amount appropriated for that year. The figures submitted for the 1906 estimate represent the maximum amount which the State can allow the City under the statute.

As previously stated in the reports relating to the schools, submitted by you to the Board of Estimate and Apportionment in 1904, the class library system now maintained in the elementary schools of the City should be incorporated with the public libraries, in order to avoid the duplication of expense and to enhance educational results. Such a plan is now in operation in Buffalo and is practicable in this City. It is recommended that the library appropriation asked for 1906 be granted in full to the Department of Education, but with the suggestion that a plan be worked out and adopted whereby, hereafter, the funds so expended shall, in effect, be transferred to the Public Library authorities to purchase books for school use.

The proposed expenditures for 1906 for libraries and apparatus, Regents' schools (Item 16 of the schedule), amounting to \$8,750, are similar in character and principle to expenditures for libraries in the elementary schools, mentioned in the preceding paragraph. Appropriations for this purpose are used to purchase books and apparatus for the high schools. It is recommended that the estimate be granted in full.

## SALARIES OF JANITORS.

Item 17 of said schedule, aggregating \$1,497,870.90, is to provide money for paying the salaries of Janitors in all schools. This estimate is an increase of \$145,628.35 over the estimate for 1905, and of \$461,711.77 over the amount made available for this purpose during that year.

The estimate is made up as follows:

For day schools now in operation	\$1,367,943 92
For new buildings and additions	47,983 48
For evening schools	3 <b>7,942</b> 50
For evening play centres, vacation schools, etc	44,001 00
Total	\$1,497,870 90

The expenditures for Janitors' salaries from the 1904 account, as per Department of Finance books June 30, 1905, aggregated \$926,582.42.

The large increase in this account over the amount made available for the current year is mainly due to the proposed change in the method of employing Janitors for the public schools. At present the Janitor of a building is allowed compensation according to the size of the building. He employs his own helpers and is directly responsible to the Committee on Care of Buildings for the keeping of the premises in proper condition. It is proposed to substitute the direct employment system under conditions which are already familiar to the Board of Estimate and Apportionment, a similar proposition having been made by the Department of Education in presenting its estimate in 1904 and again in 1905. Inasmuch as the direct employment system has been given a trial by the Board of Education and has proved to be more expensive and not so satisfactory as the plan now in operation, and, considering the fact that said Board is practically unanimous in not indorsing the proposed change, it is recommended that no provision be made in the 1906 appropriation for the cost of introducing the direct-employment system into the schools.

The amount of money that will be required for the year 1906 to pay the salaries of Janitors of day schools now in operation at the present rate of compensation is \$1,040,-824.68. In addition to this it is estimated that \$129,926.98 will be needed for Janitors in new buildings and additions, for evening schools, and for vacation schools, recreation centres and playgrounds, making a total of \$1,170,751.66. It is recommended that \$1,147,870.90 be granted.

#### LECTURES.

Item 18 of the 1906 estimate, amounting to \$82,700, is to equip the evening lecture centres with stereopticons and other apparatus used in illustrating the lectures, to provide salaries for Janitors and local Superintendents, and to pay advertising bills and rental for halls.

The estimate for this purpose is the same as last year, no increase being asked. The appropriation for 1905 was \$67,700, and it is now claimed that as a result of the reduction made the Supervisor of Lectures has been handicapped in carrying out his plans during the current year. It is recommended that \$77,700 be appropriated for lectures during the coming year.

## SUPPORT OF THE JAMAICA NORMAL SCHOOL.

Item 19 is for the support of the Jamaica Normal School, which is to be transferred to the City on January 1, 1906. The proposed expenditures are for books, janitor service, fuel and all other purposes exclusive of Teachers' salaries. It is recommended that this estimate be eliminated, inasmuch as the regular appropriations for such purposes for the school system as a whole would seem to be ample to cover the needs of this school.

#### AUTOMOBILES.

Item 20 of the estimate for the Special School Fund is to provide money for the purchase of four automobiles, at \$750 each, for the use of the Deputy Superintendents of School Buildings. While, of course, such an innovation may be desirable, it is a dangerous precedent to establish, because there is no apparent reason why Inspectors of Buildings should be provided with such means of transit any more than Inspectors of Instruction, including School Superintendents, Directors, and the whole corps of Special Supervisors, who travel about from school to school. It is therefore recommended that no appropriation be made for this purpose.

RECAPITULATION.

Statement Showing Special School Fund Appropriations for 1906, as Proposed, with 1905 Appropriations, etc.

	Available Amounts, 1905.	cation Estim	ate	Appropriations 1906, as Co Recommended with 1905 I to be Made Amour		Compared Budget	
		for 1906.		for 1906.	Increase.	Decrease.	
Supplies	\$1,188,000 00	\$1,449,423	50	\$1,374,423 5	\$186,423 50		
General Repairs	641,126 40	*1,185,247	74	660,247 7	19,121 34		
Furniture and Repairs	127,360 50	214,158	00	164,158 0	36,797 50		
Pianos and Repairs	14,099 00	28,900	00	18,900 0	4,801 00		
Fire Alarms	1,300 00	2,500	00	2,500 0	1,200 00		
Fuel	453,387 00	451,863	35	451,863 3	• • • • • • • • • • • • • • • • • • • •	\$1,523 65	
Rents	133,266 00	112,539	00	112,539 0		20.727 00	
Compulsory Education	37,750 00	83,500	00	58,500 0	20,750 00		
Transportation	30,330 85	45,504	00	40,000 0	9,669 15		
Water	2,400 00	2,400	00	2,400 0	ı		
Salaries, Officers, Clerks	316,540 00	353,350	00	333,350 0	16,810 00		
Nautical School	52,000 00	45,567	00	43,000 0		9,000 00	
Incidental Expenses	75,000 00	112,127	00	100,000 0	25,000 00		
Heat, Light and Power, Hall							
of Education	7,950 00	7,950	00	7,950 0	• • • • • • • • • • • • • • • • • • • •	• • • • • •	
School Libraries	21,530 15	26,824	00	25,824 0	5,293 85	• • • • • • • •	
Libraries and Apparatus	7,250 00	8,750	00	8,750 0	1,500 00	· · · · · • • •	
Janitors' Salaries	1,036,159 13	1,497,870	90	1,147,870 9	111,711 77		
Lectures	67,700 00	82,700	00	77,700 0	10,000 00	· · · · • • • •	
School	• • • • • • •	7,900	00		• • • • • • • • • • • • • • • • • • • •	· · · · • • • • •	
Gasoline Runabouts	• • • • • • • • • • • • • • • • • • • •	3,000	00			• • • • • •	
Totals	\$4,213,149 03	\$5,722,074	49	\$4,630,976 4	\$449,078 11	\$31,250 65	

<sup>\*\$500,000</sup> to be provided for in Corporate Stock issue, to be used for betterments.

Net total increase proposed, 1906 appropriations over 1905, \$417,827.46.

If the amounts proposed to be allowed for the several Special School Fund accounts for 1906 be approved by the Board of Estimate and Apportionment, it is proposed that they be apportioned and distributed among the several borough accounts in conformity to the Charter requirements before final action is taken, such apportionment to be made in the ratio of the original estimate of the Board of Education.

Summary of Department of Education Estimate and Budget for 1906 (on Basis of Proposed Reductions), with Comparisons.

	Amount Available 1905.	Departmental Estimate 1906.	1906 Appro- priations, as Proposed.	Increase of Proposed Appro- priation Over Amounts Avail- able 1905.
General School Fund Special School Fund	\$17,783,868 74 4,213,149 03	\$19,403,966 47 5,722,074 49	\$18,739,422 97 4,630,976 49	\$955,554 23 417,827 46
Totals	\$21,997,017 77	\$25,126,040 96	\$23,370,399 46	\$1,373,381 69

Percentage of increase proposed, 1906 Budget over 1905 allowance, .0624.

## CORPORATE STOCK AND BUDGET ALLOWANCES.

The appropriations made by the Board of Estimate and Apportionment for the General and Special School Funds are for the maintenance of the school system. Moneys for the construction of school buildings are provided by the issue of bonds. The bond issues and the appropriations for maintenance for the past five years are as follows:

Amount of Bonds Authorized by the Board of Estimate and Apportionment During the Years 1901, 1902, 1903, 1904 and 1905 to September 11, and Appropriations for Current Expenses 1901 to 1905, Inclusive.

Year.	Corporate Stock.	Current Appropriations.	Yearly Increase of Current Appropriations.	
1901	\$4,169,383 00	\$18,512,817 69		
1902	8,076,137 00	19,248,017 77	\$735,200 08	
1903	9,788,430 00	20,188,270 56	940,252 79	
1904	9,350,000 00	20,828,172 76	639,902 00	
1905	11,500,000 00	21,997,017 77	1,168,845 61	
1 <b>90</b> 6		*23,370,399 46	1,373,381 69	

<sup>\*</sup> Appropriation recommended.

## BUDGET APPROPRIATIONS RECOMMENDED.

As the result of this examination it is suggested that in making the appropriations for 1906, the Board of Estimate and Apportionment recommend that the General and Special School Funds be apportioned to the following accounts:

## General School Fund.

	General School Lund.	•	
1.	Elementary schools—Salaries of regular Teachers	\$14,392,804	14
2.	Elementary schools—Salaries of special Teachers	302,030	44
3.	High, Training and Normal schools—Salaries of Teachers	2,048,550	62
4.	Elementary evening schools—Salaries of Teachers	467,159	00
5.	Evening high schools—Salaries of Teachers	227,102	00
6.	Vacation schools—Salaries of Teachers	71,314	50
7.	Vacation playgrounds—Salaries of Teachers	54,900	00
8.	Evening recreation centres—Salaries of Teachers	76,356	00
9.	Baths—Salaries of Swimming Teachers	5,648	00
10.	General Supervision—		
	Board of Superintendents	52,500	00
	District Superintendents	130,000	00
	Board of Examiners	20,000	00
	Supervisors, Directors, et al	65,300	00
II.	Compulsory Education—		
	Salaries of Attendance Officers	83,700	00
	Salaries of Teachers in truant schools	10,356	
12.	Salaries of substitute and per diem Teachers	350,702	02
13.	Evening lectures—Fees of Lecturers	81,000	00
14.	Corporate schools—Per capita allowance	300,000	00
		\$18,739,422	97
	Special School Fund.		_
1.	· .		
2.	Supplies (all boroughs)	\$1,374,423	50
4.	Supplies (all boroughs)	\$1,374,423 660.247	-
	General repairs (all boroughs)	660,247	74
2. 3. 4.	General repairs (all boroughs)	660,247 164,158	74 00
3.	General repairs (all boroughs)	660,247	74 00 00
3. 4.	General repairs (all boroughs)	660,247 164,158 18,900	74 00 00 00
3. 4. 5.	General repairs (all boroughs)  Furniture and repairs (all boroughs)  Pianos and repairs (all boroughs)  Fire alarms (all boroughs)	660,247 164,158 18,900 2,500	74 00 00 00 00
3. 4. 5. 6.	General repairs (all boroughs)  Furniture and repairs (all boroughs)  Pianos and repairs (all boroughs)  Fire alarms (all boroughs)  Fuel (all boroughs)	660,247 164,158 18,900 2,500 451,863	74 00 00 00 00 35 00
3. 4. 5. 6. 7.	General repairs (all boroughs)  Furniture and repairs (all boroughs)  Pianos and repairs (all boroughs)  Fire alarms (all boroughs)  Fuel (all boroughs)  Rents (all boroughs)	660,247 164,158 18,900 2,500 451,863 112,539	74 00 00 00 35 00
3. 4. 5. 6. 7. 8.	General repairs (all boroughs)  Furniture and repairs (all boroughs)  Pianos and repairs (all boroughs)  Fire alarms (all boroughs)  Fuel (all boroughs)  Rents (all boroughs)  Compulsory education (all boroughs)	660,247 164,158 18,900 2,500 451,863 112,539 58,500	74 00 00 00 35 00 00

12.	Nautical School	43,000 00
13.	Incidental expenses	100,000 00
14.	Heat, light and power, Hall of Education	7,950 00
15.	School libraries	26,824 00
16.	Libraries and apparatus	8 <b>7</b> 50 oo
	Janitors' salaries (all schools)	
18.	Lectures	77, <b>7</b> 00 00
	-	

**\$**4,63**0,97**6 **4**9

Respectfully submitted,

# MATHILDE COFFIN FORD, ROBERT B. McINTYRE,

Investigations Division, Department of Finance.

October 16, 1905.

## Cost of Maintaining the Public School System of New York City.

Hon. EDWARD M. GROUT, Comptroller:

SIR—In compliance with your instructions I have prepared the following reports in relation to the cost of maintaining the elementary schools of the City as supplemental to the reports made to you by the Investigations Division of the Department of Finance in June, 1904.

The reports of 1904 suggested economies in the administration of the elementary school system. The plan of the present inquiry has been to ascertain what progress has been made since the date of the 1904 reports in the way of effecting a more economical administration of school affairs, and where possible to suggest further economies which may be introduced without injury to the work of the schools.

A Summary of the Findings of the Reports of 1904, and Subsequent Action by the Department of Education.

The document entitled "Reports of an Investigation Concerning the Cost of Maintaining the Public School System of The City of New York, by the Department of Finance (Investigations Division)," was submitted by you to the Board of Estimate and Apportionment in June, 1904. That inquiry disclosed that the course of study for the elementary schools was unduly expensive because it was overloaded: that an extravagant system of special supervision obtained in the elementary schools; that there was waste in the management of the recreation centres, vacation schools and playgrounds; that an expensive class library system was needlessly maintained: that expenditures for printing and stationery for the Board of Education were on an extravagant basis; that the delays on the part of the Board of Education in improving school

sites which were available and subject to its orders were adding to the burden of taxation, and that the business of purchasing supplies for the schools had been conducted in a loose and extravagant manner.

It will be recalled that the immediate occasion of your investigation concerning the conduct of the schools was the public announcement by the Board of Education that, owing to alleged insufficiencies in the appropriations made by the Board of Estimate and Apportionment for 1904, it was decided to curtail or abandon certain special divisions of school work, the particular reference being to the evening schools, the recreation centres, vacation schools and playgrounds.

It is a matter of record that your investigation prompted the Board of Education to inquire specially into the conduct of the schools in order to determine "where and how economies might be made." The official inquiries of the School Board disclosed that waste and extravagance had obtained in the use of fuel; that the text-book list might be curtailed to advantage and expenditures in this direction thereby reduced; that a considerable reduction might be made in the cost of the vacation schools and playgrounds; that economies might be effected in the purchase and distribution of books, stationery and other school supplies; that unnecessary mixed classes were a source of needless expense; that the clerical force in the elementary schools was on an extravagant basis, along with other findings of a similar nature.

In consequence of the investigations made by the Department of Finance, and of other inquiries apparently prompted thereby, reforms have been introduced into the school system of the City which have resulted in large economies in school expenditure as well as increased efficiency in school work. The course of study has been put upon a more practical basis through the elimination of extraneous and superfluous demands which made for waste of time and material, and defects in the organization of the schools have been corrected. All this has been brought about mainly through the efforts of the Board of Education to discover waste in the operation of the school system and to eliminate it in order to keep expenditures within the appropriations made for school purposes. The school system is growing so rapidly that even an increase of a million and a half dollars per year (\$1,168,845.01 for 1905) in the appropriations made for its maintenance calls for the strictest economy on the part of the Board of Education and great wisdom in apportioning school funds among the various divisions of school work, if the natural expansion and development of the school system, as a whole, is to be provided for and no legitimate demands denied.

After the revision of the course of study, which is the most important reform accomplished, and the curtailment of waste in the management of the summer schools and playgrounds, which was the most glaring defect disclosed during your investigation, comes the reorganization of the Bureau of Supplies, which Bureau has charge of the business of purchasing books and other school supplies, including fuel. The disbursements of this Bureau from the 1904 account aggregate \$1,919,631.15. In the one item of fuel alone the Committee on Supplies of the Board of Education has

effected savings amounting to thousands of dollars per year. This is disclosed by the fact that, notwithstanding the growth of the school system, the proposed expenditures for fuel during the year 1906, as given in the Departmental Estimate now under consideration, are less than the corresponding estimate for 1903 and \$1,523.65 less than the amount made available for the purchase of fuel during the current year. That more economical methods obtain in the administration of this Bureau is further evidenced in the proposed expenditures for books and other educational supplies during the year 1906, this estimate being \$158,493.39 less than the amount asked for the same purpose for 1904, and in the fact that disbursements from the incidental expense account of the Board of Education were reduced from \$99,156.85 in 1903 to \$72,163.40 in 1904. In the item of contract printing alone expenditures were reduced to \$30,659.07 in 1904 as against \$45,712.89 in 1903, a decrease of \$15,053.82, while for non-contract printing disbursements fell from \$5,437.93 in 1903 to \$494.15 in 1904.

In the 1906 estimate of the Board of Education twenty-one items out of a total of fifty-eight represent a decrease below the corresponding estimate for 1905. Most of these decreased estimates constitute proposed expenditures for some phase of school work, from which unnecessary expense has been eliminated during the past two years. The economies already introduced into the elementary schools alone will aggregate at least half a million dollars yearly, if carried to the full, not to speak of savings in the secondary schools, and in the various special schools which constitute the later departures in public school work in this City.

Cost of the Public School System for the Year Ending December 31, 1904.

The entire school plant of the City, including sites and buildings, valued at \$60,000,000, having over 16,000 teachers and other employees, enrolling 625,000 pupils, called for an aggregate expenditure last year of \$29,380,152.65. In addition to the appropriations made by the Board of Estimate and Apportionment, and the funds resulting from the sale of bonds, which are used for erecting school buildings and for the purchase of sites, the Department of Education has certain special or trust accounts which aggregate several hundred thousand dollars yearly. The following official statement of the Department of Education is for the calendar year ending December 31, 1904, and shows that its available resources for that period were over \$40,000,000.

General Financial Statement of the Board of Education for the Year Ending December 31, 1904.

•	Resources.	Expenditures.	Balance (Cash)
General School Fund	\$16,877,380 65	\$16,632,094 85	\$245,285 86
Public School Teachers' Retirement Fund	1,378,590 69	486,540 83	892,049 86
Special School Fund	4,947,665 99	4,085,240 29	862,425 70
Special or Trust Accounts	441,266 41	186,215 72	255,050 <b>6</b> 9
Bonds, Corporate Stock, Revenue Bonds, etc	16,886,324 48	7,990,060 96	8,896,263 5
Total resources, all funds all years.	\$40,531,228 22		
Total expenditures, all funds, all year	- 'S	\$29,380,152 65	
Total balances, all funds, all years (	(cash)		\$11,151,075 5;

The appropriations made by the Board of Estimate and Apportionment for the maintenance of the schools during the year 1905 aggregate \$21,997,017.77. The issue of bonds during the current year to provide money for purchasing sites and building new school-houses aggregates \$11,500,000 (September 29, 1905). This makes a total of \$33,497,017.77, which sum is the amount available for school purposes during the year 1905, exclusive of the Special or Trust Funds accruing from the State and of the balance of the General and Special School Fund appropriations of previous years now unexpended.

Respectfully submitted,
(Signed) (Mrs.) MATHILDE COFFIN FORD.

# Changes in the Course of Study for the Elementary Schools.

Hon. EDWARD M. GROUT, Comptroller:

SIR—Relative to economies already made through modifications in the course of study for the elementary schools, and concerning the wisdom of further changes in that course, I beg to report as follows:

In order to inquire into the conduct of the public schools as means to judging the wisdom displayed by the Board of Education in spending the very large and growing appropriations which are made for school purposes, it has been necessary for the Department of Finance to examine critically the course of study which obtains because the greater part of the school money is expended for instruction. In fact the school system is maintained for the sole purpose of teaching, so that its organization and equipment at all points are determined primarily by the educational ideas which shape the curriculum.

The course of study is the pivot about which the school system revolves. It lays out the work to be accomplished, fixes the order in which it shall be taken up, and apportions the time to be given to each branch of instruction during all terms from the kindergarten to the City College. Out of a total appropriation by the Board of Estimate and Apportionment of \$21,997,017.77 for school purposes during the calendar year 1905, \$17,783,868.74 (the General School Fund) was for instruction alone (salaries of the teaching force), the remainder, or \$4,213,149.03 (the Special School Fund) being appropriated for educational supplies of various kinds, janitors' salaries, fuel, repairs, furniture and other items incidental to the work of the schools.

The elementary (day) schools cover the eight years' work between the kindergarten and the high school. They contain ninety-four per cent. of all the children enrolled in the regular schools and ninety per cent. of all the teachers employed, and therefore constitute the great bulk of the school system and the main source of school expenditures. Following upon the consolidation of the boroughs which now constitute the Greater City, the most important problem which the Department of Education had to face was the formulation of a course of study for these schools which would harmonize the work throughout the entire City and at the same time meet the widely divergent needs of our vast polyglot population. Owing to the magnitude and astonishing growth of its school population, and the number of pupils speaking strange tongues, the metropolis has the most complex and difficult school problem which ever confronted an American municipality.

Under the provisions of the Charter the Board of Education has the power, upon the recommendation of the Board of Superintendents, to adopt and modify courses for all the schools. When the school interests of the Greater City had been centralized, a course of study for the elementary schools was formulated by the Board of Superintendents and adopted by the Board of Education. It took effect in the schools in September, 1903.

The new course was framed on "modern and progressive lines." It represented the so-called new education in its latest stage of development, and was the most elaborate and ornate plan of work ever put upon any system of public schools, but, as tested by time, it was more ambitious than practical. It was hailed from near and far by a certain order of enthusiasts as a beautiful ideal in elementary education, while it raised a storm of protest from the Teachers of New York who were compelled to view it as something to be achieved in practice. Starting in the schools, adverse criticism of the new curriculum extended to parents and the press, and finally culminated in organized opposition which would not down until it had compelled a revision of the course. The opposition centred about the so-called "fads" and the special or extra Teachers employed to supervise them. The "fads" included drawing, construction or making, sewing, cooking, music, physical training, nature study and other lines of work which are comparatively new, the common branches being called the "essentials."

## The New Course of Study as Revised.

Following upon the widespread and increasing demand for modification, the course of study was revised during the spring of 1905. Amendments to this effect were adopted by the Board of Education on June 21, to take effect in the schools the coming September. In this revision the amount of work prescribed for the several grades of the elementary schools was reduced and the course as a whole put upon a more practical working basis. It now promises to be more effective and at the same time less expensive. In education, as in other lines of business, true economy always makes for greater efficiency. In effect, science is economy, and its application to the world's business is gradually eliminating waste in all directions. The movement was certain to overtake extravagances in the educational system, and in the end it will put all school expenditures on a true basis.

The greatest source of waste in the operation of New York's school system is not the unjust prices which have sometimes been paid for supplies; the waste of materials furnished for summer schools; the excess of high salaried supervision, nor that certain expenditures are unnecessary, as already pointed out. These are indeed important matters, but they are small when compared to the prodigious waste, both of time and money, which is directly traceable to defective methods of teaching. The school buildings of this City are coming to be marvels of comfort and convenience, while the merely scholastic equipment of the teaching force is unparalleled, but the whole scheme of instruction is crude, and not well adapted to the ends in view, and this because the Superintendents who regulate it do not possess the science which would enable them to remedy its defects. Here is the fundamental cause of waste in school expenditures.

It is important for the public to recognize at this critical period in the development of popular education in the metropolis that there is, as yet, no science of education. The truth is that the vast industry of teaching children is everywhere carried on without clear and adequate knowledge of the principles which underlie and control it. The ancients worked out the science of mathematics, and the modern world has achieved astronomy, physics, chemistry and biology, but it remains for the twentieth century to formulate psychology and sociology, the twin sciences which directly pertain to and underlie the business of education, and which alone can put it upon a sound basis. Modern science is now building skyscrapers and subways, magical electrical machines and marvellous industrial combinations, but her crowning achievement will be the education of the child.

Not until science has co-ordinated the movement of the human mind, and has determined the form and functions of society, will it be possible to make scientific judgments concerning the education which children should have in order to insure their fullest development as individuals, and their highest usefulness as members of society. Until this be done, educators will continue to drift about on an unknown sea, without

adequate chart or compass to direct their course. No amount of loose talking about education, however charged with pedantry, can take the place of a determined science.

## Present Educational Results Overestimated.

In the face of so much talk and argument concerning education, it is a matter of practical business to bring certain realities to the fore as the only means of checking the claims of the school superintendents who direct the educational work of the City, and thereby lessening the imposition which half-formed, and therefore questionable methods of instruction now make upon taxpayers and the general public.

While true education is of course priceless, there is need to recognize that, in very great part, the present output of the schools is perhaps the most overestimated product of the time. The plain fact is that to a great degree "going to school" has become the modern superstition; it is a wearisome routine which usurps the time and depletes the physical forces of the youth of the country with practical results which are far below the customary estimates. Too often, the traditional routine goes to destroy originality and initiative, and makes for stupidity and superficiality.

The schools are lacking owing to their failure to prepare boys and girls for the duties of life. To educate an individual is not only to give him an all-round development, but it is also to find the peculiarities of temperament and character which go to determine his vocation in life, and to train his powers to that specific end. A diploma should be a certificate of power to do the thing for which one is by nature fitted, instead of a mere smattering of book learning concerning all manner of things, soon to be forgotten. Measured by this supreme test, the schools of to-day are largely a failure.

At first glance, it might appear that these considerations are away from the practical, but the very opposite is true as the first need in getting at the real state of the school system is to recognize that it is under the heel of a half-formed science. Because psychology has not been fully formulated or unified, pedagogy, which is the application of psychology to the art of teaching, is potential only rather than actual. The professional pedagogue of to-day is too much like the alchemist of ancient times who dreamed of converting baser metals into gold. Science had to verify and organize the facts of chemistry before the various chemical industries could be organized. The professors of a half-science are always extreme in the arrogance of self-assertion, and it is just because of this that fault-finding with the present methods of education should be encouraged; were true science in possession of the field it would provide its own standards of criticism. The excesses in various directions which now mark the management of the schools justify the critical attitude of the officials whose duty is to stand guard at the City Treasury. When the science of education is fully worked out, that science will of itself fix accurately the limit to the demand for money.

## Defects in the Course of Study.

In the reports submitted by you to the Board of Estimate and Apportionment in June, 1904, the following conclusions relating to the curriculum for the elementary schools were set out.

First—That the new course of study adopted in 1903 exceeded the legitimate bounds of the elementary schools. It included instruction which properly belonged in the secondary schools, or in special schools, particularly in music, manual training and physical training.

Second—That the new course contained certain features of manual training work which should be eliminated because of their having no intrinsic value as education.

Third—That the course as a whole was too heavy, particularly in the special branches, more work being required than could possibly be done.

Fourth—That the school time was not properly apportioned among the different subjects, too much time being given to the special studies and not enough to the common branches.

Fifth—That the subject matter of the elementary course as a whole was not well organized; this lack of proper co-ordination and correlation between the several branches of study being the chief source of its ineffectiveness.

Changes Made in the Work Prescribed in the Special Studies.

In revising the curriculum of the elementary schools, the Board of Superintendents treated the course in music in a radical way. Most of the technical and scientific work which had made this course so burdensome and unpopular was entirely eliminated. In addition, the work prescribed for the several grades was simplified throughout by moving the work laid out for each class one step forward into the next higher grade. This modification of the course in music constituted a much needed reform and, like most of the changes made in the special studies, was directly in line with the suggestions made by your Department.

As to manual training, your investigation pointed out that the manual and domestic arts have been introduced into the public schools of this City more rapidly than they could be co-ordinated and put upon a practical working basis, and that as a result the teaching of these branches has been crude and unsatisfactory, and has not yielded an adequate result for the large amount of time consumed. The manual training instruction as a whole has been disorganic or out of relation, and because it failed to connect with the other work of the schools and with the home life of the children, it has lacked interest and motive.

In line with these criticisms, Dr. William H. Maxwell, City Superintendent of Schools, gave the defects above mentioned critical attention in his last annual report, issued some months later. He emphasized the need of a closer correlation between all subjects of study, and especially recommended that the constructive work be re-

lated to the other branches and to the home environment. When the curriculum was revised, the course in drawing and constructive work was changed in accordance with these ideas. It was also simplified and made somewhat more practical, but the excesses in the other lines of manual training work, for the most part, remain. Instruction in sewing was eliminated from the first two years and confined to girls in all grades, but the specialized instruction in dressmaking and design now given during the seventh and eighth years was allowed to remain in the elementary course, in place of being relegated to the secondary and special schools. The course in cooking remains as before, but an effort is making to improve the teaching of this branch by fitting up all new kitchens for individual work so that girls may participate in the cooking lessons instead of merely looking on. This plan is more expensive, but it stands for true economy.

At the present time New York City is devoting more time and attention to manual training in the elementary schools than any other city in the country. The Department of Education has not only given drawing, construction or making, decorative design, plain sewing and dressmaking, cooking, housekeeping, laundry work and nursing place in the regular elementary schools, but it has established special vacation or summer schools which give all their time to manual training (including the domestic arts) and physical culture. It has also introduced cooking and sewing into the evening schools, and established a Manual Training High School and a Girls' Technical High School, and the rising demand for special trade or industrial schools has prompted the evening trade schools which have just been opened in Brooklyn and Long Island City, and which constitute a new departure in this field.

The Department of Education can only justify its action in introducing so many different lines of manual training by putting the instruction in them upon a productive basis. This is an industrial age, and the schools are struggling to meet the needs of the people. The United States is to-day the centre of the most wonderful industrial development which the world has ever seen, and the public school curriculum is expanding to meet the new conditions. It is but natural that New York City should lead in the movement. All the forces of the age are centering in America and coming to a head in this City, and consequently in education, as in other lines of business, things are moving more rapidly in the metropolis than anywhere else in the world.

## The Teaching of English.

The course of study in English includes reading, spelling, penmanship, composition and grammar. In revising the curriculum few changes were made in this course except to simplify the work prescribed in the study of masterpieces of prose and poetry. The course in English was officially reported to be "quite satisfactory," notwithstanding the well known fact that the average child, on graduating from the elementary schools, can neither read ordinary matter with ease and rapidity nor write good English. Inquiry on this point covering a period of many years has convinced

the writer that the majority of people never acquire sufficient skill to read a news-paper or a popular novel without undue effort; they go through life handicapped because they have not mastered the chief instrument in acquiring knowledge. The blame for this fact lies at the doors of the schools. The printed page has become the main channel of intelligence; it is the leading source of information on all subjects, and the chief business of the common school is to teach the masses to use it. Whatever else may be said, learning to read and acquiring a liking for good reading remain the first essentials in elementary education.

The main reason why the children in the schools do not learn to read is because they do not have sufficient practice to acquire facility in getting thought from a printed page. Reading is only now in the way of becoming a universal achievement, and it takes an enormous deal of practice to develop skill in this new and difficult art. The child who is learning to read must read and read and continue to read, just as he learned to talk through constant talking. If success in the teaching of reading is to be achieved, reading must become an integral part of every lesson in which thought is developed, and this is true for all the forms of language work. The doctrine of correlation, or concentration, of which so much is heard, must come to be practiced as well as preached. Language training should be made the dominating feature of primary education, and all other branches of instruction should be tributary to it. Lessons about plants and animals, stories of mythology and history, poems and pictures have been introduced into the primary schools mainly to provide children with something interesting to read and write about, and, if properly used, such lessons will greatly enhance results along these two main lines.

## The Schools Need the Public Libraries.

Although the children in the City schools are now provided with more reading matter than was formerly supplied, they have not enough at the present time. The greatest need of the elementary schools in this City to-day is more reading matter of the right sort. If the average child could be provided with enough good books and his interest aroused concerning their contents, he would fairly teach himself to read, with such assistance as he would naturally seek from those about him. It is a suggestive and startling fact to those engaged in the business of education that about the only children who now acquire great skill in reading are those who learn before going to school in homes supplied with an abundance of attractive reading matter.

To repeat a very important conclusion previously made in a report to you, it is not possible to supply the ordinary school room with as many books as children need, nor is it necessary to do so, as the City maintains a vast system of circulating libraries which provide children's books of the choicest kind in great abundance. The very material which the children need is already at hand, but they are not trained to use it. In place of using the splendid public libraries of the City, the Board of Education maintains an absurdly inadequate miniature plant of its own, consisting of ten thousand

branches and costing approximately \$50,000 a year, about \$22,000 of which comes from the State and the remainder from the municipal budget. Were the expenditures for class libraries to be cut out, reference books, of course, excepted, and the public libraries fully used, the work of the schools on the side of reading would be greatly improved.

The narrow and erroneous notion that the school is an institution complete and sufficient within itself still obtains in the Department of Education and goes to vitiate its action. The Department of Education is only one organ in the municipal system, and it must co-operate freely with other departments if duplication of expense is to be avoided and the highest practical results attained. The school has been held apart from life until its isolation has come to be its greatest defect. All educational progress lies along the line of closer co-operation between the school, the home, the library and the workshops of the world.

## Spelling.

Regarding the frequent complaints that children in the City schools do not learn to spell, the conclusion is that they do not acquire skill in spelling for the same reason that they are deficient in reading, namely, a lack of practice. In the mistaken endeavor to teach so many unrelated and disconnected things, teachers become hurried and confused and so neglect to drill pupils in the spelling of all new words as they occur in the various lessons.

## Penmanship.

It is generally recognized that the teaching of penmanship does not produce satisfactory results, no method having as yet been enforced in the schools whereby children can be trained into the habit of writing well in an easy, natural manner. Enough time and attention are given to teaching writing during the first three years to produce results, and the children write fairly well in these grades, but after the sixth year not enough attention is given to the subject to maintain discipline, and the tendency is for children to drop into careless habits of scribbling, and they too frequently graduate from the schools without the ability to write a legible hand.

## Revision of the Course in Mathematics.

In revising the course of study the Board of Superintendents simplified to an extent the work prescribed in mathematics in all grades above the third, most of the work in algebra and geometry prescribed for the seventh year being entirely eliminated. The amount of work in arithmetic required in the several grades was reduced in order to give more time for drill, as there has been widespread complaint that children trained in the public schools do not learn to figure quickly and correctly.

While it is true that poor results are obtained in the teaching of arithmetic and that the course of study in that subject needed to be curvailed, the School Superintendents have not as yet gotten at the real source of the difficulty. It lies in the fact that the arithmetic lessons do not interest the children and therefore fail to develop power and skill, interest being the key to all success in teaching.

As a whole the recitations in this branch are stupid. They consist for the most part of mechanical solutions and listless explanations of imaginary problems, having no relation to actuality. They are manufactured mainly out of mere suppositions, there being no reason for their solution, unless it be to waste the precious hours of youth. Acres are still reduced to inches, and children continue to puzzle their brains over nonsensical and useless calculations which are so far removed from practical life that they fail to arouse interest.

In contrast with this, it should be an easy matter to gather from the actual business life of the City, and the world of business in general, a sufficient number of real problems to displace the rubbish indicated. The making of practical and interesting number calculations, such as underlie the movement of business, would develop power, because it would give meaning to the work in the class room. The world is teeming with practical problems in arithmetic which present themselves for solution every hour in the day. If this constant stream of living matter could be let into the public schools to displace the dead-work which now oppresses children and benumbs their faculties, it would transfigure the arithmetic instruction. Nothing is so interesting as life, and the school should be connected with it at every possible point.

In revising the course of study it is to be regretted that the language of percentage, which is simple and easily taught in connection with the elementary work in fractions prescribed for the 4B and 5A classes, was not introduced before the 5B grade. The majority of boys and girls now leave the schools without any knowledge of this common need of business life. Under the compulsory education law a child is entitled to leave the school when he has completed the 5A work or its equivalent.

## A Step Backward in the Teaching of History.

In revising the course of study for the elementary schools a radical change was made in the plan of teaching history. The former efforts of the Board of Superintendents to frame a course in this subject for the elementary schools "along modern and progressive lines" resulted in failure, and they have been obliged to retreat from the advanced position which they sought to occupy.

The vast progress in historical knowledge during recent decades, and particularly in the method of handling or relating historical fact, has opened up new possibilities in the teaching of history to children. The Superintendents sought to take advantage of this in the course adopted in 1903, but the crude results proved that they were not equal to the problem. The history of the world can now be grasped in its unity, and the present struggle in education is to present historical events in their organic relations. Under the customary teaching, the history of the United States has been torn apart from its vital connection with that of other nations and the movement of life as a whole, and put before children as a meaningless mass of unorganized and often unimportant matter, which, because of its lack of interest, has to be mechanically memorized to be retained long enough to pass the conventional examination. This method, which, as experience has shown, produces neither a knowledge of his-

tory nor a love for its study, is now seen to be unscientific, and when the new course of study was made out for the elementary schools the Board of Superintendents attempted to overcome its defects. English history was introduced into the seventh year, and an effort was made to give the children a general view of the history of the world in the 5A grade before the detailed study of the history of the United States is taken up. The theory acted upon is a correct one, and it would have worked a much needed reform in the teaching of history in the City schools had it been skilfully applied.

It is now recognized that by using a limited number of wisely selected and highly organized historical and biographical stories, arranged in proper sequence and aptly illustrated, it is possible to present to children during the first four or five years of school life connected pictures of those great epoch-making events which have constituted the successive steps in man's progress from savagery to civilization. Such a course of work is designed to lay the foundation for a more intelligent study of American history in the grammar grades.

In attempting to apply this sound and attractive theory the Board of Superintendents met with failure, and it is not to be wondered at. In the 1903 course of study sixty-three biographical narratives and historical events, spreading over a period of forty centuries and embracing all the countries of the world, were thrown together, without any clearly defined purpose or definite organization of matter, and unloaded upon the defenseless children of the 5A grade. Work enough for five years was prescribed for five months. This ridiculous 5A course in history was so unanimously condemned that when the course of study was revised it was eliminated in its entirety and American history alone substituted in its place.

## A Needed Reform.

The present method of teaching history is defective, not only because the story of our own country is taught apart from those broader relations which give it interest and meaning, but also because the past as a whole, in whatever aspect it may be considered, is not presented in relation to the present. The leading motive in studying the history of the past is to throw light upon the present, the chief value of a knowledge of the ancient and medieval worlds, and the development of modern civilization being that it helps its possessor to understand the great realities which confront him. Severed from its vital connection with the world of to-day, which is but the farther unfolding of yesterday, history becomes dead matter, too much memorizing of which produces that mental indigestion or stupidity so common among over-schooled, book-fed people.

The teaching of current events should have a large place in the public schools. If the daily movement of news were intelligently used by the teacher it would vitalize every phase of school work. The newspaper is the great educational force of the age—greater, in fact, than the school itself. It is the daily book of the people and teaching children how to use it aright should be an important feature of elementary education.

The children are already reading the newspaper, and they must inevitably continue to do so more and more. It is therefore supremely important that they be intelligently guided and directed in its use. The problem of teaching children to read will never be fully solved until the public schools utilize both the public libraries and the daily newspaper.

#### Commercial Education.

The same forces which are adding manual and industrial training to the curriculum are compelling the public school system to branch out into so-called commercial education. Some years ago, both in Europe and America, men of affairs began to complain that the schools failed to meet the needs of this commercial age, and the complaint has now become wide-spread.

Armed with science, modern commerce has become mistress of the world and she is already laying her hands on popular education to shape it to her needs. The scepter of power has passed to the masters of commerce, and the educational system is therefore beginning to provide special training for a business career. The colleges and universities of the country are adding a study of modern commerce in all its phases to their curruculums, and so-called commercial courses are being established in the secondary schools. New York City is in line with this development. A High School of Commerce was established in 1902, which was designated to be "the foremost institution of its kind in the United States." A magnificent new building was erected, and the school now enrolls about 1,400 pupils. An elaborate course of study has since been laid out for this school, but the Board of Education seems not to be aware that it is facing an unsolved problem in the field of commercial education.

An examination of the course of study outlined for the High School of Commerce discloses its inadequacy to meet the demands of the vastly complex and highly specialized commercial organizations which machinery, rapid transportation and electric communication, together with chemistry and the other physical sciences, have built up. The fact is that no scientific plan has yet been formulated for commercial education, the great difficulty in the way of such an effort being that the facts of modern commerce have not been classified. There is as yet no body of organized knowledge concerning this most complex product of all the ages. The so-called text-books on commerce are hardly more than crude memoranda of undigested and unrelated facts. The history of commerce will have to be written and a scientific treatment of the subject worked out for the schools before substantial progress can be made in commercial education.

## Commercial Geography in the Elementary Course.

The above recital of fact is necessary to throw light on the changes made in the course in geography for the elementary schools under its recent revision. This course was curtailed and readjusted all along the line, but the greatest change consisted in the elimination of the greater part of the physical geography prescribed for the seventh year, and the substitution of commercial geography in its place. A study of the indus-

trial and commercial development of the leading countries of the world was introduced, special attention being given to the commerce of the United States. This is a part of the general scheme for teaching commerce in the schools. But the attempt to teach commercial geography is surrounded by the same difficulties which beset commercial education as a whole. For some years the Royal Geographical Society of England has been struggling to promote the teaching of commercial geography, but without success, owing to the want of a literature of the subject. The treatment of commerce in the geographies now in use in the elementary schools of this country is a mass of unrelated facts which cannot possibly be taught with satisfactory results, and it is therefore important that the Board of Education recognize the nature of the difficulties they are seeking to overcome.

## Nature Study.

A leading cause of the current agitation over what should be taught in the elementary schools is the fact that the physical sciences have been forcing their way into the curriculum. The new course of study adopted in 1903 prescribed a study of plants, animals, metals, minerals, and familiar natural phenomena during the first five years, and simple work in elementary science, including a study of mechanical powers, gravity, heat, light, and electricity during the seventh and eighth years, work of this nature being omitted during the sixth year. The time alotted to such instruction was ninety minutes per week during the first four years, seventy-five minutes per week during the fifth year, and eighty minutes per week during the seventh and eighth years, making an average of one and one-quarter hours per week during the entire eight years of elementary school work. When the course of study was revised the amount of work prescribed in elementary science was considerably reduced in all grades above the 3A.

This particular part of the course of study for the elementary schools has been the cause of much adverse criticism, owing to its lack of success in the schools, and a general absence of knowledge as to the real object in view in teaching nature to children. Teachers have taken up the work prescribed with so much unwillingness, and the facilities for handling it have been so inadequate, that little has been accomplished in the way of teaching elementary science. For the most part, the work in the upper grades has consisted of a mere memorizing of book stuff, rather than a direct study of natural phenomena through observation and experiment; while in the lower grades the so-called nature study, where it existed at all, has been mostly a device for killing time while seeming to conform to the requirements of the Board of Superintendents.

This state of affairs is to be deplored because the observation and study of natural objects is a logical part of primary education. It trains the child to see and thereby furnishes him with something to read and write and cipher about. It puts him in direct contact with real things which he can look at, and feel, and describe, and draw and even attempt to make. The greatest defect in education at the present time is the fact that children continue to be fed on second-hand matter from books. This accounts for their failure to develop power. It is important that the intrinsic value

of nature study be recognized and that everything practicable be done to further such instruction in the schools, especially in this City, where children are denied the natural environment of trees and flowers and other objects in nature.

If all the class-rooms of the City were abundantly supplied with specimens of plants and animals and minerals, and if they were used for observation and study under the direction of enthusiastic Teachers skilled in handling such objects, the teaching of the three R's would be tremendously enhanced. In fact, the teaching of reading, writing and arithmetic cannot become highly effective until it is made scientific by giving children something which interests them to read and write and cipher about.

At present the schools fall short in cultivating observation. The study of environment, including nature and the products of men's hands, is the pivot about which the new education revolves, and the failure to develop these central subjects and properly organize the other branches about them, so that the whole curriculum would work as a unity, is the main cause of the present dissatisfaction with the so-called "fads" in the public schools.

Just as, on the side of the child, progress in education is awaiting the development of the science of psychology, so, on the side of environment, it has awaited the development of physical science and other fields of truth. The common school curriculum has been a natural growth. It started with the three R's only because, when the invention of the printing press gave birth to popular education, reading, writing and arithmetic stood for the entire scope of learning. When political geography and American history were formulated, the curriculum expanded to embrace these subjects, and now that physical science has enlarged the field of knowledge and created new subjects of learning, these inevitably find their way into the schools. The elements of physiology and physical geography are already established in the elementary curriculum, and such simple applications of botany, zoology, mineralogy, metrology, physics and chemistry as children can comprehend are following. Modern science has transformed the world through its magical inventions and it must necessarily enter into the scheme of popular education.

#### The Schools Need Publicity.

Facts abound to show that the widespread publicity which has been given to school affairs during the past two years has had a profound and beneficial effect upon the schools. Many defects in the school system can only be corrected through a complete exposure to public view. Publicity is the corrective force of the age and it should be intelligently applied to all branches of municipal business.

The Department of Education is the largest and most expensive division in the municipal system, its appropriations for maintenance alone last year aggregating nearly one-fifth of the entire running expenses of the City, while the disbursements for the purchase of school sites and the erection of new school houses has increased that amount by several million dollars more. The school system has become so gigantic,

and the demands of the Board of Education for money so enormous, that it is no longer possible to keep school affairs veiled in secrecy, and, besides, it is contrary to good public policy to attempt to do so. The experience of the Board of Education, since the new course of study was adopted in 1903, clearly shows that it is not possible to free the schools from the weight of the past and carry education into the new fields which are now opening before it without instructing public opinion and thereby enlisting the sympathy of the people. Happily, the notion that the school system can be separated from the general movement of the municipality, and a sacred circle drawn about it to protect it from legitimate inquiry and criticism, has been proved to be false. Scientific inquiry from an independent source is vital to the welfare of the schools. The school system of this City is moving out into so many new fields of experiment, involving such enormous expenditures of money, that unless unprejudiced criticism can be used to temper the feverish enthusiasm which has come to dominate school affairs and thereby check extravagance and waste, the demand for money threatens to outrun all limits. Moreover, there is danger that the essentials in education may be neglected. The scheme of education has become so elaborate and so much looseness has come in that it is quite as easy to devise ways and means of spending a hundred millions annually on the schools as to spend thirty millions, unless some guiding principles can be found which will determine the limits of the system and fix its legitimate expenditures.

#### Conclusions.

To summarize the conclusions of this report, it appears that:

- I. The methods of instruction as a whole which now obtain in the schools make for waste of time and material because they are largely tentative or experimental, the science of education not having been fully determined and formulated as yet. This waste is naturally greater in the special studies and other later developments in school work.
- 2. Owing to the lack of a true science of education it proved difficult to determine the proper limits of a course of study for the elementary schools. The course framed by the Board of Superintendents in 1903 exceeded the true scope of elementary education and prescribed instruction which belonged in the secondary schools or in special schools.
- 3. That course has now been curtailed to an extent which makes it better adapted to the needs of the elementary schools, and it should therefore be possible to achieve more satisfactory results during the coming year. The changes made in the curriculum should go to lessen expenditures for books and other school supplies and to check somewhat the demand for teachers' and school accommodations.
- 4. The results attained in the teaching of reading, arithmetic, history and geography continue to be unsatisfactory, though the outcome is better than in the special studies. The failure to develop skill in reading is due primarily to the lack of sufficient practice, the need being to provide a greater supply of reading matter and to devote

more time and care to the teaching of this subject. The greater supply of reading matter can be provided, and a duplication of expense avoided, through direct co-operation with the City's library system.

- 5. It is found that the failure to develop skill in arithmetic is due primarily to the uninteresting character of the problems given rather than to overloading the course of study or to a lack of time given to this subject.
- 6. In revising the course in history a backward step was taken owing to the unsuccessful attempt of the Board of Superintendents to apply a sound and progressive theory. There is need of a radical reform in the teaching of history in the City schools.
- 7. In revising the curriculum commercial geography has been made prominent in the elementary course. There is need to recognize that the attempt to teach this subject is beset with peculiar difficulties owing to the absence of a scientific treatment of commerce in the text-books of the day.
- 8. The elements of the physical sciences, under the name of Nature Study, have been forcing their way into the elementary schools. There is a growing conviction that the value of such instruction, when given with proper materials and skill, should be recognized.
- 9. The facts are cumulative that the schools have derived benefit through the publicity which has been thrown upon them during the past two years. Because of it, the course of study has been revised, not to speak of other good results in the line of various economies.

Respectfully submitted,

(Signed) (Mrs.) MATHILDE COFFIN FORD.

## Economies in the Administration of the Elementary Schools,

Hon. EDWARD M. GROUT, Comptroller:

SIR—Relative to economies which have been introduced into the elementary schools of the City by the Department of Education since the reports of the Department of Finance, urging the necessity of the same, were issued in June, 1904, and concerning the possibility of further economies in the administration of these schools, I beg to report as follows:

Before proceeding to an analysis of the economies already made or under way, and concerning those which are still possible, it appears necessary to outline in brief the organization of the elementary schools as a basis for the proposed analysis.

The public school system of The City of New York, as administered by the Department of Education, consists of the following branches:

- 1. Elementary Schools.
- 2. Secondary or High Schools.

- Special Schools:
- (a) Evening Schools (Elementary and High).
- (b) Vacation Schools.
- (c) Vacation Playgrounds.
- (d) Evening Recreation Centres.
- (e) Truant Schools.
- (f) Training Schools.
- (g) Nautical Schools.
- (h) Evening Lecture Centres.

Note—In addition to the public schools administered by the Department of Education there are 26 corporate schools, including industrial schools and orphan asylums, which share in the General School Fund.

Exclusive of the evening schools, the vacation schools and playgrounds, the recreation centres and the lecture centres, which are not included in the official statistics of the school system proper, compiled by the Department of Education, the whole number of schools under the jurisdiction of the Board of Education at the close of the school year ending July 31, 1904, was 501. They were distributed and classified as follows:

Boroughs.	Training Schools.	High Schools and High School Depart- ments.	Elementary Schools.	Truant Schools.	Nautical Schools.	Total.
Manhattan	ı	4	192	ı	ı	199
The Bronx		1	40			41
Brooklyn	1	6	137.	1		145
Queens		6	75			81
Richmond	••	. 1	34	••		35
Entire City	2	18	478	2	1	501

The total number of pupils enrolled in these schools during the year ending July 31, 1904, was 622,201, this number being an increase of 46,633 over the enrollment of the previous year. The average daily attendance was 466,571. The teaching force, exclusive of special Teachers, Directors and Superintendents, was 12,958.

## Organization of the Elementary Schools.

As appears in the above table, the elementary day schools constitute the greater part of the public school system. The average daily attendance in these schools for the school year ending July 31, 1904, was 448,950. The average number of pupils on register in these schools for the same year was 510,560, this number being an increase of 43,830 over the average register for the preceding year.

An elementary school is divided into classes, the number of classes in such schools ranging from 1 to 87. Technically a class is understood to mean the number of pupils placed under the care of one Teacher, regardless of whether they are all in the same grade or not. The average number of pupils to a Teacher in the elementary schools, based on the average register, during the year ending July 31, 1904, was 46.

For purposes of organization and supervision, the elementary schools of the City are divided into five orders, as follows:

First Order-Schools having 48 or more classes.

Second Order-Schools having from 28 to 47 classes.

Third Order—Schools having from 12 to 27 classes.

Fourth Order—Schools having from 6 to 11 classes.

Fifth Order—Schools having less than 6 classes.

The number of Teachers assigned to an elementary school is the same as the number of classes, except in schools of the First, Second and Third Orders, an additional Teacher being appointed to such schools whose duty it is to perform such clerical work as the Principal shall determine, and to teach a class in the absence of a class Teacher if a substitute is not called in.

In addition to class-room Teachers and so-called additional Teachers, each elementary school has a Principal in charge. In schools of the First, Second and Third Orders the Principal is not required to teach a class. In schools of the Fourth Order the Principal may be required, at the discretion of the Board of Superintendents, to teach a class. Schools of the Fifth Order are under the administration of a class Teacher, who is designated as the senior Teacher of the school.

In schools of the First Order Principals may have two Assistants, and in schools of the Second Order one Assistant, who shall perform such supervisory teaching and clerical work as the Principal may direct. In schools of over 67 classes the Principal may have a third Assistant. Assistants to Principals are called heads of departments.

Over and above Principals and heads of departments, each of whom is assigned to one particular school, the elementary schools of the City have a corps of general supervisors, including Teachers of special branches, Directors and Assistant Directors of special branches, District Superintendents, Associate Superintendents and the City Superintendent. A Special Teacher has charge of the instruction in one special branch of study in a group of schools varying in number according to the size of the schools. A Director or Assistant Director of a special branch has the general supervision of that branch in one or more boroughs. A District Superintendent is directly responsible for all the schools in two of the forty-six local districts into which the City is divided for school purposes. The Associate Superintendents, together with the City

Superintendent, constitute the Board of Superintendents, which has the general direction of the educational work of the school system as a whole, subject to the approval of the Board of Education.

# Expenditures for Teaching Force.

The entire teaching force in the elementary schools during the school year ending July 31, 1904, was constituted as follows:

· ·	
Teachers, including Kindergartners and Clerical Assistants	11,400
Principals and heads of departments	685
Special Teachers	319
Directors and Assistant Directors of special branches	15
District Superintendents	<b>2</b> 6
Associate Superintendents	8
City Superintendent	I

The proposed expenditures for salaries for the teaching force in the elementary schools of the City for the year 1905, as given in the estimate of the Department of Education submitted to the Board of Estimate and Apportionment September 22, 1904, were as follows:

# Elementary Schools.

I.	For salaries of all persons now employed in elementary schools, computed at the rates which will be operative December 31, 1904 (figures based upon actual name by name computation)		00
2.	For annual automatic Davis Law increments for persons mentioned in paragraph 1 (figures based upon actual name by name com-		
	putation)	202,708	28
3.	To fill vacancies existing in elementary schools at the time of preparation of this estimate; persons commencing service at opening of schools in September, 1904, and consequently not included in the regular school schedules covered in paragraph.	.00	
	above	386,450	00
4.	To provide for increase of 25,000 in attendance at elementary schools upon opening, September 1, 1904	400,500	00
5.	To provide for increase in attendance at elementary schools during		
	the year 1905	245,753	33
6.	For additional compensation for female Teachers of boys' and mixed		
	classes in elementary schools, \$60 per annum, as per statute	381,480	00
	classes in elementary schools, 500 per annum, as per statute	381,480	00

\$14,453,078 61

# Special Teachers.

13.	For salaries of all persons now employed as special Teachers in elementary schools, computed at the rates which will be operative.	·
	ative December 31, 1904 (figures based upon actual name	
	by name computation)	\$364,585 <b>00</b>
14.	For annual automatic Davis Law increments for persons mentioned in paragraph 13 (figures based upon actual name by name com-	
		- 6
15.	putation)	5,637 07
	covered in paragraph 13	32,700 00
16.	To provide for increase in attendance during the year 1905	44,100 00
	•	\$447,022 07
	General Supervision.	
Boa	rd of Superintendents	\$52,500 00
	rict Superintendents	130,000 00
	· · · · · · · · · · · · · · · · · · ·	٠.
Dire	ectors, Assistant Directors and Teachers of special branches	41,000 00
		\$223,500 00

It should be noted that three of the District Superintendents have special assignments of work outside the regular elementary day schools, one being assigned to evening schools, one to high and training schools, and one to recreation centres and vacation centres, and that the Board of Superintendents has other responsibilities besides the elementary schools.

It would appear from the above that out of a total estimate of \$18,728,487.48 as the amount needed for the General School Fund for 1905, \$15,123,600.68 was for the elementary schools alone.

An analysis of the economies which have been introduced into the elementary schools of the City, since you began to investigate the cost of maintaining them in 1904, goes to show that the administration of these schools was unduly expensive at that time. Reforms have been introduced which, if carried to the ft.ll, will effect a saving of at least half a million dollars annually in these schools alone, and there are further practical economies which should be immediately enforced.

#### School Accommodations.

Next to the maintenance of the teaching force, the purchase of school sites and the construction and equipment of school buildings constitute the largest item of expense in connection with elementary education in this City. To provide school accommoda-

tions for a rapidly augmenting population, which now aggregates about four millions, is one of the largest problems with which the municipality has to deal.

The total registration of pupils in the elementary schools of the City in May, 1905, was 525,431, as against 509,969 in May, 1904, an increase of 15,462. In spite of the efforts of the present administration, which has appropriated more money for the schools than has ever before been devoted to that purpose during the same time, to keep pace with the growing demand for school accommodations, the seating capacity of the elementary schools is still so inadequate that thousands of children are enrolled under a part-time system of instruction, the work being so arranged that two classes use the same schoolroom. The number of pupils in part-time classes in May, 1905, was 66,394, as against 75,084 in May of the preceding year, a decrease of 8,690.

According to the report of the Superintendent of School Buildings, submitted to the Board of Education on July 10, 1905, seventy-two new elementary school buildings are under construction or contracted for, designed to furnish 86,550 additional school sittings, distributed throughout the several boroughs as follows:

Borough of Manhattan, sittings	33,900
Borough of The Bronx, sittings	14,750
Borough of Brooklyn, sittings	29,450
Borough of Queens, sittings	6,500
Borough of Richmond, sittings	1,950

Plans are also ready for advertising, or in the draughting room, for new buildings and additions which, when completed, will afford accommodations for 28,250 elementary pupils.

It is estimated that at the opening of the school year in September, there will be 20,000 new sittings ready in Manhattan, 11,000 in The Bronx, 7,000 in Brooklyn, 1,650 in Queens and 400 in Richmond, making a total of over 40,000 in the entire City.

### More Pupils on Part-Time Than Necessary.

The problem of furnishing school accommodations for the children of the City is directly related to the course of study which obtains. This fact has not been generally recognized. If the course of study is too heavy, or if it is not adapted to conditions as they actually exist, it retards the movement of pupils from grade to grade and thereby congests the lower grades of the schools.

The course of study adopted in 1903 prescribed more work than the average child could do, and consequently must have resulted in the retention of an undue proportion of children in the lower grades. The Department of Education has no summary of facts which shows the percentage of pupils promoted in all grades of the elementary schools during the last two years. Were such statistics collected, it may be regarded as certain that the showing would prove that an undue proportion of pupils fail to be promoted from term to term.

In the course of the Department of Finance inquiry concerning the cost of maintaining the public school system of this City, submitted to the Board of Estimate and Apportionment in June, 1904, it was disclosed that the third year classes in the elementary schools, in which sewing was taught to boys, contained a large percentage of pupils thirteen, fourteen and even fifteen years of age. This disclosure prompted the Department of Education to collect official statistics showing the ages of children between five and twenty-one years in all the schools from kindergarten to high school. A deplorable situation was revealed.

In the elementary schools alone 192,143 children, or 39 per cent. of all the pupils in these schools at the time the inquiry was made, were found to be from one to seven years above the normal age for the grades in which they were classified. The percentage of older pupils was greatest in the intermediate grades, the third year classes having 45 per cent. of such children, the fourth year classes 49.2 per cent. and the fifth year classes 49 per cent. In the 5B classes these older pupils begin to drop out rapidly and go to work, as they are entitled to do under the compulsory school law when they have completed the 5A grade or its equivalent.

These facts show that when the inquiry was made 39 per cent. of all the pupils in the elementary schools were not receiving instruction suited to their years because they were too old for the grades in which they were working. This being true, it follows that the remaining 61 per cent. of the children were being retarded in their progress through the schools by the presence of children in the classes who monopolized the teacher's time and attention and lowered the standard of the work because they did not belong there.

Several causes contribute to this state of affairs, but undoubtedly the main one is the course of study. Not only has the elementary course been too heavy for the average American child for the past two years, but it has not at any time met directly the peculiar needs of the multitude of non-English speaking children attending the schools. Non-English speaking children are so handicapped by not using the English language that they cannot possibly meet, in the time allotted, the requirements of a course of study designed for American-born children, and so they lag behind and congest the lower grades. All this goes to necessitate more part-time classes.

# The Problem of the Immigrant Child.

The stream of immigration, which deposited 821,169 aliens at the port of New York during the fiscal year ending June 30, 1905, has swollen so rapidly during the last decade that the assimilation of non-English speaking children has now become the most perplexing single problem in the management of the elementary schools. The failure to handle these children in a satisfactory manner not only retards promotion in the primary grades and so creates an abnormal demand for school sittings, but the practical results obtained in the teaching of non-English speaking children under the present methods have been so poor that they have become a matter of serious concern to the educational authorities.

The Department of Education has been compelled to devise new schemes for making the teaching of immigrant children more effective. The experiment has recently been made of forming special classes for such children, these classes having a much simplified course of study, consisting for the most part of the three R's only. It is fair to say that this experiment is a departure in the right direction. It should be carried to the point of determining whether it is wise to establish the general policy of having a special course of study for non-English speaking children. It may no longer be expedient to compel all the elementary schools of the City to conform to one cast-iron course of study.

In any event it has become imperative that some way be found to free the immigrant child from the burden of a curriculum which does not take sufficient account of his peculiar difficulties, and to facilitate his efforts to acquire such a knowledge of the common branches as is obligatory under the compulsory education law. It appears plain that different standards as to classification and promotion should be established in order that these immigrant children may be advanced more rapidly through the several grades. An absurd custom has continued of putting immigrant children of ten and twelve years of age, who cannot speak English, in with American children just out of the kindergarten and holding them there to learn the language regardless of their prior schooling.

This lack of a proper adjustment between the course of study and the conditions which actually exist in the schools has contributed largely to the overcrowding of the primary grades, and in this way has added to the number of pupils on part time. If the course of study for the elementary schools can be adapted to the peculiar needs of non-English speaking children, and if a better system of classification for such children can be attained, as appears probable, it would go to reduce materially the number of children in part-time classes and so affect directly school expenditures.

#### A Defective System of Promotion.

In general, the extraordinary demand for school accommodations which now exists in this City is caused to a degree by a defective system of promotion, and this without reference to a poorly adjusted course of study. The entire system of promotion which continues to hold in the schools is on an unscientific basis. It is too mechanical for practical use in dealing with the minds of children. A whole class of boys and girls is held back until the end of a term so that all but the very dullards may catch up. Bright pupils spend a large part of their school life marking time. Half a million children are swallowed up in New York's elementary schools, put through the same mechanical routine according to the same time schedule, and are turned out after the same pattern, regardless, for the most part, of the wide differences between individual boys and girls. This large fact brings to view the essential crudity of our present system of primary education. While, of course, it is not possible for a Teacher to individuate instruction fully in handling fifty children,

it remains true that far more can be done in this direction than is now accomplished With a flexible system of promotion worked out and applied, and unnecessary delays in promotion thereby eliminated, the fiscal problem of providing seating accommodations would be simplified.

#### Unnecessary Expenditures for Clerical Work.

Prior to the Comptroller's investigation the clerical work in the elementary schools was costing more than double the amount necessary to secure efficient service in this division of school work, and, although expenditures for such services have been reduced nearly \$100,000 since the Special Committee on Economy was appointed by the Board of Education in January, 1904, there is still room to save almost as much more.

It has been customary to fill the position of additional Teacher (Clerk) with a regular Teacher at schedule rates, such Clerical Assistants being assigned or sent back to class-room work as occasion might demand. The position of Clerical Assistant, which is regarded by Teachers as desirable, came to be used as a reward of merit, and thus it happened that a considerable number of the ablest and highest salaried Teachers in the schools were spending their time in mere routine work which any competent clerk could perform, the schools being deprived, meanwhile, of the valuable services of these experienced Teachers in the class-room. Of course, as claimed by those who oppose the policy of filling clerical positions with substitutes, it is true that additional Teachers or Clerks sometimes do substitute work in the classrooms in the absence of regular Teachers. This, however, is a minor consideration, since regular substitutes are provided for such duties, the expenditures for "substitutes et al.," as given in the estimate of the Department of Education for 1905, being \$299,884.23; and besides, the substitutes who are put into the schools as Clerks are usually either Teachers of some experience, or girls fresh from the Teachers' Training School.

After mature consideration of the whole question of Clerical Assistants, the Special Committee on Economy recommended to the Board of Education that the Board of Superintendents be instructed to transfer all regular Teachers engaged in clerical work to class-room positions, and to fill their places with persons who should receive a substitute's pay. This policy was adopted by the Board and, although it has been the subject of much controversy, it still obtains, and the Board of Superintendents is gradually proceeding to fill all clerical positions with substitutes who receive three dollars per day. But this change is not being effected as rapidly as it should because of the opposition which has been raised by Principals and Teachers concerned in such transfers, and the consequent reluctance on the part of the Committee on Elementary Schools to carry such action to the full, even though it has the approval of the Board of Superintendents. The policy of filling the clerical positions in the elementary schools with substitutes is an economy which is not only practical but also desirable on all accounts.

In February, 1905, the Special Committee on the Revision of the Budget reported to the Board of Education that the amount paid for the services of additional Teachers had been reduced \$75,000 during the year 1904. They also stated that expenditures for such services at that time amounted to over \$300,000 a year. Official statistics show that 38 transfers of additional Teachers were made during the year ending July 31, 1905. According to a report made by the Board of Superintendents to the Board of Education on March 22, 1905, after which date no transfers were made to take effect during that school year, there were 318 elementary schools entitled to an extra or additional Teacher, only about one-half of which had been filled by the assignment of substitutes. If the policy which now obtains were carried to the full, present expenditures for clerical services could still be reduced nearly \$100,000. The average annual salary now paid to regular Teachers acting as Clerks is \$1,204. The amount paid to a substitute Teacher is \$3 per day for every day of actual service, or \$576 per year. If all the schools entitled to additional Teachers were supplied with regular Teachers at the rate now paid, the cost would be \$1,204 × 318, or \$382,872. If supplied with substitute Clerks, the cost would be \$576  $\times$  318, or \$183,168, a difference of about \$200,000 per year.

## Unnecessary Expenditures for Bonuses.

Another source of unnecessary expense in the administration of the elementary schools lies in the fact that expenditures for bonuses given to Teachers of mixed classes have been larger than need be. For long it has been customary in New York City to give female Teachers of boys' classes extra pay, and gradually women who taught mixed classes demanded extra compensation.

The Davis Law, which took effect in May, 1900, not only provided that female Teachers of boys' classes should receive a bonus of \$60-per year in addition to their schedule rate of pay, but also that female Teachers of mixed classes should receive such additional pay. The following item, which appears in the estimate of the Board of Education for 1905, specifies the amount required for such additional compensation to Teachers of boys' and mixed classes:

	Number of Teachers at \$60 Per Annum.		
Manhattan	3,085	\$185,100 00	
The Bronx	540	32,400 00	
Brooklyn	2,123	127,380 00	
Queens	455	27,300 00	
Richmond	155	9,300 00	
Total	6,358	\$381,480 00	

A mixed class is one composed of both boys and girls, but according to the By-Laws of the Board of Education "the term mixed class, as used in chapter 751 of the Laws of 1900, shall be understood to mean a class composed of both boys and girls in which the aggregate number of days' attendance of the boys in such class for any given term shall have been not less than 40 per cent. of the aggregate number of days of attendance of all the pupils in such class during the same term."

After the passage of the Davis Law the possibility of an extra five dollars per month for the Teacher of a mixed class led to the practice of manipulating the classes in the elementary schools in such a way as to secure this extra compensation for the largest number of Teachers possible. In the reorganization of the schools from term to term more mixed classes were formed than were necessary, and so expenditurs for bonuses were swelled beyond legitimate bounds. Moreover, the Davis Law was so construed that even Kindergarten Teachers, who had on an average only 28 pupils to a class, received the extra sixty dollars per year.

In January, 1904, during the discussion of ways and means of effecting economies in the administration of the school system, City Superintendent Maxwell deplored the fact that under the operation of the Davis Law influences had been directed toward principals which had resulted in an undue increase of the number of mixed classes in the schools. In a report to the Special Committee on Economy (Board of Education), the City Superintendent estimated that \$25,000 could be saved on this score during the year 1904 by a rearrangement of classes.

In a personal investigation of Public School 110 and the primary departments of Public Schools 49, 53, 70 and 82, in the Borough of Manhattan, in January, 1904, the writer found the number of mixed classes to be 37 greater than need be; that is, in these five schools, 37 teachers out of a total of 129 were receiving \$60 per year more than the proper organization of the schools demanded.

One of the district superintendents in upper Manhattan made an estimate that in each of his two districts needless mixed classes were costing \$2,000 per year. In January, 1904, the Board of Superintendents issued instructions to principals to reorganize their schools so as to save the sixty dollars bonus whenever possible. In a circular letter to the Principals of the Eighth and Twelfth Districts, Superintendent Edward W. Stitt said:

"I have been making careful study of the monthly reports and submit herewith an arrangement showing the registers in each of the lower grades, the classes having been selected from the various schools of our two districts. You will note that the first two columns show that 19 teachers now draw the bonus in these various grades. By the new arrangement suggested in the second columns only 7 teachers need draw the bonus, thus saving \$720. You will also notice that by consolidation one teacher's salary could be saved, which would save \$600 in addition, or a grand total of \$1,320.

"When you remember that the plan offered for your consideration only takes note of one grade in a school, and that there are 18 principals in our two districts, it is evident that the adoption of some such plan will save thousands of dollars."

This letter, together with the facts cited above, goes to show what large economies were possible along this line.

It is impossible to make an accurate statement concerning the amount of money wasted through the payment of unnecessary bonuses during the past year, or during the school year ending in June, 1904, because the determination of the facts necessary for such a judgment would involve a personal investigation of the conditions existing in all the elementary schools throughout the entire system. The facts could, however, be easily gathered by the Department of Education, working through the school principals and school superintendents, but strange to say, although school officials agreed more than a year ago that the payment of unnecessary bonuses was an extravagance, nobody connected with the Department of Education appears to have any definite knowledge as to how far such a reform was really effected. During the excitement of a heated controversy over waste and extravagance in the school system, the fiat went forth to dispense with unnecessary mixed classes, but neither the Board of Education nor the Board of Superintendents appears ever to have taken the trouble to ascertain to what extent such classes existed at the time when school officials were guessing that anywhere from \$25,000 to \$100,000 a year might be saved by the correction of this evil.

The facts concerning mixed classes have not been determined as a guide to future action, nor has any attempt been made to establish a standard whereby such extravagances may be guarded against in the reorganization of the classes in the elementary schools from term to term. This is a fair example of the methods which prevail in the management of public schools, not only in this City but all over the country. Accurate information of a light-making character is lacking at all important points. Statistics are piled up, but they are for the most part worthless as guides to action. Under the present system, principals, teachers and clerical assistants are worn with the making of endless reports which have little value because it has not yet been determined what facts are needed as a basis for intelligent action in framing policies for the management of public schools. The necessity is to lift the whole school problem out of the region of mere opinion and guess work and put it upon a scientific basis.

## Possible Economies Through Consolidation of Schools.

It is now a recognized fact that the schools are suffering from over-supervision. One of the policies adopted by the Board of Education on its own initiative for the correction of this evil was the consolidation of two or more separate departments into one school under a single management. In the organization of the elementary schools in the Boroughs of Manhattan and The Bronx, it has been customary to put a Primary Department for girls or boys, or for both, and a Girls' Department for boys or for girls into one school building. In some instances three such departments were

put into the same building, and thus it came about that several distinct schools under as many independent principals are found under one roof. The City Superintendent of Schools maintains that the results of this system are not so satisfactory as those obtained in schools in which the work of all grades is under the general supervision of one principal. He also asserts that the one-principal plan makes it possible to utilize the sittings in a school building to better advantage. Besides, it reduces expenditures for supervisory officers and clerical assistants. For these reasons the City Superintendent has instituted the policy.

In consolidating schools it usually happens that the services of one principal and one or more heads of departments and clerical assistants can be dispensed with. According to the report of the Special Committee on Economy (February 24, 1904), \$27,000 was saved by such consolidation during the year ending July 31, 1903. No statistics have been compiled by the Department of Education for the year ending July 31, 1904, but at the request of the Department of Finance, such statistics have been set up for the year ending July 31, 1905. During that year six schools were consolidated or organized, with results which appear in the following table:

	BEFORE CONSOLIDATION.	AFTER CONSOLIDATION.
Public School.	Names of Principals, Assistants to Principals, etc., with Titles and Salary.	Public 'Names of Principals, Assistants to Prin- School. cipals, etc., with Titles and Salary.
·	Vacancy         (man)         Principal         \$3,500           Margaret         A. Thistle, Assistant to Principal         1,600           Margaret         E. Pettit, Additional Teacher         1,320	46 Wm. A. Boylan, Principal\$3,500  Margaret A. Thistle, Assistant to Principal
46 P.	Mary W. Swartz, Principal 2,500  Matilda H. Dardis, Additional Teacher	Margaret E. Pettit, Additional Teacher
	Total	Total\$8,020
58 B.	Wm. F. O'Callaghan, Principal. \$3,250	58 Wm. F. O. Callaghan, Principal \$3,250
58 P.	Lena McLaren, Additional Teacher 1,320 Emma A. Egbert, Principal 2,500	Jessie B. Colburn, Assistant to Principal
	Nellie V. E. Hagen, Additional Teacher (substitute) at \$3 per day	Nellie V. E. Hagan, Additional Teacher (substitute) at \$3 per day
•	Total\$7,646	Total\$5,426
75 B.	John S. Roberts, Principal \$2,750 Abraham Goodman, Additional Teacher (substitute) at \$3 per day	75 John S. Roberts, Principal\$2,750 May I. P. Bessey, Assistant to Principal

=		
	BEFORE CONSOLIDATION.	AFTER CONSOLIDATION.
Public School.	'Names of Principals, Assistants to Principals, etc., with Titles and Salary.	Public 'Names of Principals, Assistants to Prin- School. cipals, etc., with Titles and Salary.
75 P.	Josephine E. Rogers, Principal 2.500 Rosalie Heggi, Assistant to Principal	Abraham Goodman, Additional Teacher (substitute) at \$3 per day 576 Rachel Boniface, Assistant to Principal
•	Total\$8,666	Total\$6,526
87 B.	Edward H. Boyer, Principal\$3,500 Janet C. Burnett, Additional Teacher	87 Edward H. Boyer, Principal \$3,500 Adolphine T. Hoffman, Assistant to Principal
87 G.	Ellen C. Phillips, Principal 2,500 Louise Jacobs, Additional Teacher 1,320	Janet C. Burnett, Additional Teacher 1,320
	Total\$8,640	Total\$6,420
94 B.	John D. Robinson, Principal\$3,500 Adolphine T. Hoffman, Assistant to Principal	*94G Ellen C. Phillips, Principal \$2,500 Louise Jacobs, Additional Teacher 1,320
94 P.	Cordelia S. Kilmer, Principal 2,500 Lily Haslett, Additional Teacher 1,240	94P Cordelia S. Kilmer, Principal 2,500  Lily Haslett, Additional Teacher 1,240
	Total\$8,840	Total
177 G.	Ellen T. O'Brien, Principal \$2,500 Salome A. *Rhatigan, Additional Teacher (substitute) at \$3 per day	177 Mary L. Brady, Principal\$2,500 Elise W. Korman, Assistant to Principal
177 P.	Mary L. Brady, Principal 2,500 Mary T. Stevens, Additional Teacher	Mary T. Stevens, Additional Teacher 1,240 Salome A. Rhatigan, Additional Teacher (substitute) \$3 per day 576
	Kate Enright, Additional Teacher 1,240	
	Total	Total\$5,916
	Total cost before Consolidation \$51,808	Total cost after Consolidation \$39,868
		Decrease in Total Cost \$11,940

<sup>\*</sup> While there has been no consolidation in Public School 94, there has been a reorganization of the school in connection with the consolidation in Public School 87.

It appears from the above that expenditures for supervisory officers and clerical assistants in these six schools were reduced \$11,940 per year by consolidations. If, at the same time, as is probably true, the administration of the schools consolidated was made more effective, it is clear that the policy of putting schools housed in the same building under a single management should prevail, even though it continues to arouse bitter opposition on the part of the women principals, most of whom oppose it because men are usually put in charge of consolidated schools. Centralization or high organization is the tendency of the time, and it is obtaining in education as in other lines of business.

## Too Many Principals and Assistant Principals.

It has been obvious for some time that there are too many Pincipals and heads of departments or Assistant Principals in the elementary schools of the City in proportion to the number of Teachers, especially in the boroughs of Brooklyn and Queens.

Official statistics for the school year ending July 31, 1902, show that the elementary schools of the entire City had 634 Principals and heads of departments, and 10,407 regular Teachers—an average of one supervisory officer of this class for every 16 4-10 Teachers. In Manhattan and The Bronx there was one Principal or head of department for every 21 8-10 Teachers. In Brooklyn, one for every 11 7-10 Teachers; in Queens one for every 14 Teachers, and in Richmond one for every 19 Teachers. In his annual report for that year the Superintendent of Schools commented on these facts, as follows:

"On the recommendation of the Board of Superintendents, your Board has adopted new rules, limiting the number of Principals' Assistants who are given supervisory duties. These rules were most necessary, not merely as a measure of economy, but to preserve the teaching force from the evils of over-supervision."

Official statistics for the school year ending July 31, 1903, show that the elementary schools had 670 Principals and heads of departments, and 10,884 Teachers for a year—an average of one supervisory officer of this class for every 16 2-10 Teachers. In spite of the special legislation of the Board of Education concerning the excess of such supervisory officers and the expressed solicitude of the City Superintendent that this excess be reduced, the relative number of supervisory officers in the elementary schools had increased during that school year so that each Principal or head of department now had only 16 2-10 Teachers to look after, as against 16 4-10 Teachers during the previous year. Notwithstanding this fact, the City Superintendent repeated, in precisely the same words, his observation of the previous year in his annual report for 1903.

For the school year ending July 31, 1904, official statistics show that there were 685 Principals and heads of departments in the elementary schools and 11,400 Teachers—an average of one supervisory officer of this class for every 16 6-10 Teachers. Three

· years' effort "to preserve the teaching force from the evils of over-supervision" had only increased the average number of Teachers to a Supervisor from 164-10 to 166-10!

If the number of general supervisory officers directly attached to, or devoting most of their time to, the elementary schools, including Teachers and directors of special branches, District Superintendents and Associate Superintendents, be added to the number of Principals and heads of departments, it will appear that during the school year ending July 31, 1904, New York City provided 1,050 supervisory officers for 11,400 regular Teachers in the elementary schools, or an average of one high-salaried Supervisor for every 10 9-10 Teachers. This fact lays bare the situation in regard to oversupervision. It helps to explain why the school system is unduly expensive.

## Unnecessary Expenditures for Special Teachers.

The corps of Special Teachers for the school year ending July 31, 1904, was constituted as follows:

#### Directors and Assistant Directors.

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#### Music-

- I Director for Manhattan and The Bronx.
- I Director for Brooklyn.
- 1 Director for Queens and Richmond.

### Manual Training and Drawing-

- I Director for Manhattan and The Bronx.
- 1 Director for Brooklyn.
- I Director for Queens and Richmond.

#### Physical Training-

- I Director for the City.
- 2 Assistant Directors for the City.

#### Sewing-

- 1 Director for Manhattan, The Bronx and Richmond.
- I Dirèctor for Brooklyn and Queens.

# Cooking-

I Director for Manhattan and The Bronx.

#### Kindergarten-

- I Director for Manhattan and The Bronx.
- 1 Director for Brooklyn.
- 1 Director for Queens and Richmond.

Special Teachers.

Borough.	Music.	Manual Training and Urawing.	Physical Training.	Sewing.	Cooking.	Shopwork.	<b>German.</b>	French.	Penmanship.
Manhattan	21	. 23	11	27	26	31	31	8	
The Bronx	4	4	1	8	4	4	6	1	
Brooklyn	15	16	7	14	5	I	18		
Queens	7	6	1	4	1		4	1	
Richmond	2	2	1	2	••	ĭ	••	••	ī
Entire City	49	51	21	55	36	37	59	10	

As a means of determining just what has been done by the Board of Education in the way of reducing or increasing the corps of Special Supervisors, the Civil Lists have been used. The Civil List for January, 1905, shows:

That five new Teachers of Sewing entered into the services of the Department of Education during the year 1904, and one Teacher of Sewing terminated her services with that Department.

That twenty-two Teachers of Cooking entered into the services of the Department of Education.

That three Teachers of Music entered into the services of the Department of Education, and three Teachers of Music terminated their services with that Department.

That fifteen Teachers of Drawing and Constructive Work entered into the services of the Department of Education and seven Teachers of Drawing and Constructive Work terminated their services with that Department.

That three Teachers of Physical Training entered into the services of the Board of Education and four Teachers of Physical Training terminated their services with that Department.

The Civil lists do not disclose the facts concerning the Teachers of Shop-work, but an official letter from the Hon. Frank D. Wilsey, Chairman of the Committee on Elementary Schools, states that eight Teachers of Shop-work were appointed between January 1, 1904, and January 1, 1905, as follows:

Name and Date.			Salary.
Anton Buchbinder, October 3, 1904			\$900 00
Jacob Flatow, December 1, 1904			900 00
John C. Green, Jr., November 1, 1904			900 00
Harry Jacobson, October 3, 1904			900 00
Joseph A. Levy, March 1, 1904	• • • • • • • • • • • • • • • • • • • •		1,005 00
David Meyers, October 3, 1904			900 00
Adolph Roth, November 1, 1904		•••••	900 00
George E. Strehan, October 3, 1904	• • • • • • • • • • • • • • • • • • • •	•••••	900 00
			\$7,305 00
	Date of Cessation of Service.	Date of Entrance Into Service.	Salary.
Special Teachers of Sewing.		ŕ	
Manhattan—			
Charlotte N. Roper	Dec. 1, 1904	• • • • • • • • • • • • •	\$1,200 00
Brooklyn— Harriet L. Briggs		Dec. 1, 1904	900 00
Margaret Brown	•••••	Oct. 1, 1904	900 00
Queens—			
Nattie M. Schilling	•••••	Feb. 1, 1904	900 00
Margaret H. Brown	• • • • • • • • • • • • • • • • • • • •	Oct. 3, 1904	900 00
Richmond— Frances E. Kachline		P-1	
_		Feb. 1, 1904	900 00
Special Teachers of Cooking.			
Manhattan, The Bronx, Brooklyn and Queens—			
May Brockman		Mar. 1, 1904	900 00
Mabel Campbell	• • • • • • • • • • • • • • • • • • • •	Mar. 7, 1904	900 00
Bernice L. Dole		Mar. 1, 1904	900 00
Margaret L. Dike		No date.	900 00
Ethel R. MacNachtan		Mar. 1, 1904	900 00

Mar. 1, 1904

1,100 00

Edith A. McIntyre.....

	Date of Cessation of Service.	Date of Entrance Into Service.	Salary.
Mabel P. Perry		Mar. 2, 1904	900 00
Helen A. Tolford		Mar. 1, 1904	900 00
Sarah Woolsen	• • • • • • • • • • • • • • • • • • • •	Apr. 4, 1904	900 00
Ellen R. Rushmore		June 8, 1904	1,100 00
Katherine Christian		Sept. 11, 1904	900 00
Margaret L. M. Holt		Sept. 12, 1904	900 00
Bessie Taylor	·	Sept. 12, 1904	900 00
Jennie Jameson		Sept. 12, 1904 .	900 00
Isabel S. Higgins		Oct. 3, 1904	900 00
Bertha Perham	,	Oct. 4, 1904	900 00
Clara E. Schauffler		Oct. 3, 1904	900 00
Margaret Bymhold	•••••	Nov. 1, 1904	900 00
Estelle C. Crombie		Nov. 1, 1904	900 00
Theresa Clare	• • • • • • • • • • • • • • • • • • • •	Nov. 1, 1904	900 00
Mary E. Duff	••••••	Nov. 1, 1904	900 00
Maud W. Smith		Nov. 1, 1904	900 00
Special Teachers of Music.			
Manhattan and The Bronx-			
Bertha C. Friedenberg		Apr. 4, 1904	1,000 00
George W. Gartlan		Sept. 12, 1904	1,200 00
Walter N. Ellis	Feb. 1, 1904		1,600 00
Minnie L. Pettiner	May 1, 1904	•••••	1,100 00
Brooklyn-			
T. Lewis Doyle	,	Nov. 1, 1904	1,200 00
Frederick J. Bryan	Oct. 1, 1904		1,600 <b>00</b>
Special Teachers of Drawing and Constructive Work.			
Manhattan-			
Bessie Lewinthal	Feb. 1, 1904		1,400 00
Estelle Spencer	Sept. 12, 1904		1,200 00
Helen H. Shreve	Sept. 12, 1904		1,300 00
Emma Lane	Sept. 17, 1904	Apr. 4, 1904	1,200 00
Mary E. Lavers		Feb. 9, 1904	1,200 00
Jessie T. Ames		Feb. 1, 1904	1,200 00
Helen Jarrold	•••••	Sept. 12, 1904	1,000 00
Eunice E. Nott	•••••	Sept. 22, 1904	1,000 00
Margaret L. Murphy	•••••	Oct. 3, 1904	1,000 00

	Date of Cessation of Service.	Date of Entrance Into Service.	Salary.
Brooklyn	· · · · · · · · · · · · · · · · · · ·		
Lilia A. Ilgenfritz	Feb. 1, 1904		1,400 00
Edna C. Fay	Oct. 30, 1904		1,400 00
Janet M. Dailey	•••••	Feb. 1, 1904	1,000 00
Katherine A. Lovell		Feb. 1, 1904	1,000 00
Anna E. Carpenter		Mar. 1, 1904	1,200 00
Mande Bertschy		Nov. 1, 1904	1,000 00
Joseph A. Ryan	•••••	Apr. 16, 1904	1,000 00
Anton Buchbinder		Oct. 1, 1904	900 00
Henry Jacobson	•••••	Oct. 1, 1904	900 00
Queens—			
Mary J. Quinn	Sept. 12, 1904		1,200 00
Agnes M. Herrington	•••••	Nov. 3, 1904	1,000 <b>0</b> 0
Richmond— Effie M. Van Aken	***********	Dec. 1, 1904	1,000 00
pecial Teachers and Directors of Physical Training.			
Manhattan—			
M. Augusta Requa (Director)	May 25, 1904		2,500 00
Stella Farland	Oct. 5, 1904		1,200 00
Eldora K. Richardson	Sept. 12, 1904	• • • • • • • • • • • • • • • • • • • •	1,100 00
Cornelia F. White	Dec. 1, 1904		1,200 00
Harriet Avery		Oct. 3, 1904	900 00
Queens—		•	
Margaret C. Remington		Oct. 3, 1904	900 00
Ella Hope Wilson		Oct. 3, 1904	900 00

Changes in the number of Special Supervisors, and the amount of the salary lists for each of the special studies during the calendar year 1904, therefore summarize as follows:

	Number of Teachers Appointed.	Number of Teachers Resigned.	Increase.	Decrease.
Sewing	5	1	\$3,300 00	
Cooking	22	••	20,200 00	
Music	3	3		\$800 <b>0</b> 0
Drawing and Constructive Work	15	7	6,500 00	
Physical Training	3	4		3,300 00
Shopwork	8	••	7,305 00	• • • • • • • • • • • • • • • • • • • •
Total	56	15	\$37,305 00	\$4,100 00

Total increase in salary list, \$33,205.

Total increase in teaching corps, 41 Teachers.

It appears, therefore, that during the calendar year 1904 the Board of Education appointed 56 Special Teachers, and that 15 Special Teachers resigned, making a total increase of 41 in the Special Teacher corps, and an increase in the outgo for salaries of \$33,205. It is to be noted, however, that 22 of the Special Teachers employed were Teachers of Cooking and 8 were Teachers of Shopwork, and that, as was pointed out a year ago in the reports of the Department of Finance, Special Teachers of these two subjects are in fact simply Class Teachers and not strictly Supervisors, so that the increase in the number of Supervisors, as such, was only 11.

Large Economies Possible in Expenditures for Special Teachers.

Higher compensation, a fixed term of office and larger opportunities for advancement have made school teaching in the metropolis more desirable than anywhere else in the land, and for this reason the best talent of the country has been flowing into New York City since consolidation. The Teachers of this City are the best paid in America, and it is fair to say that as a body they represent the highest degree of skill and intelligence.

The regular class-room Teachers are so well equipped for their work, and the elementary schools of the City are so abundantly provided with competent Principals and heads of departments, whose chief duty it is to supervise the teaching of all branches included in the curriculum, that there is no necessity for so many extra Teachers as are now provided to look after the instruction in the so-called special studies. The City Superintendent of Schools appears to under-estimate the ability

of his Principals and class-room Teachers, and over-estimate the value and character of the work done by the Special Teachers. It is well known that Special Teachers as a class lack a comprehensive knowledge of school work, having confined their attention to one particular phase of it, and are without actual experience in class-room work. They are therefore unable, for the most part, to give directions of a practicable nature and to present their specialty in its organic relations to the other branches of study.

In order to clear up this important topic it is necessary to recall certain facts which were set out in the reports made to you last year. Originally reading, writing and arithmetic were the only studies of a regular elementary school course, but gradually grammar, geography and history were recognized as essentials in elementary education. When music was first introduced into the public schools, Special Teachers were provided to give the instruction in that branch. The same is true of drawing, sewing, physical culture, cooking, shop-work, French and German. Thus it came to pass that there were 334 Special Teachers and Directors employed in the elementary schools at an annual cost of \$386,497.05 (school year ending July 31, 1904), to look after these so-called special studies. In the beginning a Special Teacher visited the schools and gave all the instruction in the particular branch to which the said Teacher was assigned, but gradually the regular Teachers became proficient in these new branches of instruction and began to give the lessons themselves. As this change occured the Special Teachers became merely Supervisors who visit the regular Teachers every two or three weeks to inspect their work.

It is now more than forty years since music and drawing were first introduced into the public schools of this City, and at least twenty-five years since sewing and physical training found a place in the curriculum, and it would seem reasonable to expect the regular Teachers to handle these subjects as well as the common branches. Cooking, shop-work and some other forms of construction are new developments in education, and it will doubtless be necessary to employ specialists to teach these subjects for some years to come; but the remainder of the so-called special studies, exclusive of French and German, should speedily be made regular studies which every Teacher is expected to teach with the same amount of supervision as is given the common branches. The truth is, the majority of the class-room Teachers are abundantly able to give the instruction in sewing, music, drawing and physical culture, or would be, if the course of study were confined within legitimate bounds, and that a large part of the money paid for special supervision of these subjects is therefore unnecessary expense.

The seeming demand for so much special supervision in the schools is the result of two grave defects—one in the course of study and the other in the administration of the schools:

I. The course of study adopted in 1903 was over-loaded with technical and scientific work in the special branches which did not belong in the elementary schools.

This over-elaboration and undue extension of the curriculum created an abnormal demand for special supervision.

II. Special supervision is spread indiscriminately over the whole corps of Teachers, regardless of what the actual need for such supervision may be.

The Board of Superintendents is responsible for both these defects. When the courses of study in the special branches, which were made out by the directors of these subjects, were submitted for adoption in 1903, the Board of Superintendents failed to correct the exaggerations which they contained. All strictly technical instruction, such as dressmaking and training in design, should have been eliminated, and the courses in music, drawing and constructive work, physical training, etc., reduced to proper proportions relative to the whole amount of work prescribed in all the branches for each grade. It appears plain that the Board of Superintendents failed to detect the principle which should determine the limits of a course of study for the elementary schools. It may be stated as follows:

I. Technical training, or training for a special trade or occupation should have no place in the elementary schools.

The Board of Superintendents has neglected to classify the teachers in the elementary schools on the basis of their ability to teach each of the special studies, as a means to learning just what teachers require special assistance in each of the extrastudies. Teachers of long and successful experience who have demonstrated their ability to handle a given subject should be relieved from constant supervision in that study. The extravagance of the present system of supervision lies in the fact that all Teachers are "supervised," whether they need it or not. Special Teachers are needed whenever a new branch of instruction is being introduced into the schools, but as rapidly as the regular Teachers become able to handle that branch, and just to the extent to which they are able to handle it, special Teachers should be dispensed with. The principle which should regulate this matter may be stated as follows:

II. Special supervision in any branch should be restricted to Teachers who actually need special assistance in a subject, and not spread indiscriminately over the whole corps.

The two principles set out above determine the limits of the course of study and the number of special Teachers needed in the schools. If they were applied and enforced in the elementary schools of this City, the Department of Education could save: \$150,000 a year on salaries of special Teachers and expenditures for supplies used in teaching the special studies. As it is, this amount of money was wasted last year because the course of study was beyond the scope of the elementary school and an extravagant policy of special supervision continued to prevail. As already stated, the proposed expenditures for special Teachers were estimated at \$447,022.27. This does not include the Directors and Associate Directors of special branches, expenditures for whose salaries were estimated at \$41,000, making a total of \$488,022.27 for special

supervision in the elementary schools. In addition to these, expenditures for supplies used in connection with the instruction in the special studies, as estimated by the Finance Department in the report issued in 1904, approximate \$158,840.29.

#### Conclusions.

To summarize the conclusions reached in this report:

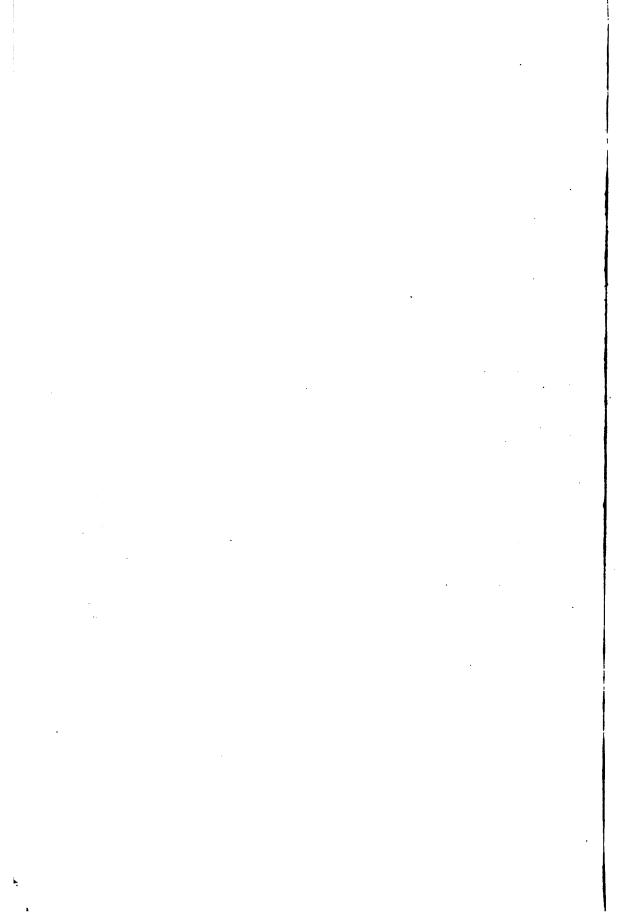
- I. The congestion in the lower grades of the elementary schools of the City and the resulting part-time classes, along with the seemingly insatiable demand for more school buildings, are, of course, primarily due to the phenomenal growth of our school population, but they have been intensified by an overloaded course of study, an inflexible system of promotion, a mistaken method of classifying immigrant children, and a failure to adapt the curriculum to the peculiar needs of our foreign population in general. All of these defects have contributed to bring about an undue retention of pupils in the lower grades of the schools.
- 2. The clerical service in the elementary schools has been conducted on an extravagant basis, owing to the custom of paying the wages of an experienced Teacher for merely clerical work.
- 3. Expenditures for bonuses paid to Teachers of mixed classes have been excessive owing to the practice of organizing a larger number of such classes than need be, in order to secure this extra compensation for a greater number of Teachers.
- 4 The plan of consolidating several schools, existing under one roof, and putting them under a single management, helps to reduce the excess of Principals and heads of departments and, therefore, the cost of maintenance. This centralizing movement should be carried to the point of reducing the number of such supervisory officers to the actual needs of the schools.
- 5. Although the corps of special Supervisors has not been substantially increased since January, 1904, only vacancies being filled at the present time, still nothing has been done in the way of classifying regular Teachers on the basis of their ability to teach the special branches as a means to dispensing with unnecessary supervision, and so reducing the expenditure for special Teachers.
- 6. A considerable advance has been effected on various lines during the past year toward overcoming these defects in the elementary schools, and the measures of economy introduced have not only resulted in a substantial saving of money, but they have made for efficiency as well. The reforms already on foot, together with those proposed in this report, should be developed and carried forward in order that the administration of the elementary schools may be put upon an economical basis and higher educational results thereby achieved.

Respectfully submitted,

(Signed) . (Mrs.) MATHILDE COFFIN FORD.



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